

# UNCLASSIFIED

AD NUMBER
AD488131
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Jul 1966. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505.
AUTHORITY
CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

488-37

FOR OFFICIAL USE ONLY



# CONSOLIDATED TRANSLATION SURVEY

Number 103

For July 1966

OFFICE OF CENTRAL REFERENCE  
Foreign Documents Division  
CENTRAL INTELLIGENCE AGENCY  
2430 E St., NW., Washington 25, D. C.

FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

FOR JULY 1966

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Requests For Copies	iv
USSR	
Economic	1
Political	7
Military	8
Geographic	9
Sociological	10
Eastern Europe	
Economic	12
Political	22
Military	23
Sociological	24
Western Europe	
Economic	26
Political	26
Military	27
Sociological	28
Africa	
Economic	29
Political	29
Military	30
Sociological	30
Middle East	
Economic	32
Political	33
Sociological	33
Far East	
Economic	33
Political	34
Military	35
Sociological	35

	<u>Page</u>
<b>Latin America</b>	
Economic	36
Political	37
Military	37
Geographic	37
Sociological	37
<b>Scientific</b>	
Aerospace	38
Agriculture	38
Biological & Medical Sciences	40
Chemistry	47
Earth Science & Astronomy	49
Electronics	54
Engineering	57
Fuels & Propulsion	62
Materials & Metallurgy	62
Mathematics & Data Processing	81
Nuclear Sciences & Technology	82
Physics	85
Miscellaneous	90
<b>Information on Cover-To-Cover Translations</b>	91
<b>Index to Authors</b>	154

## CONSOLIDATED TRANSLATION SURVEY

### PREFACE

This survey is prepared monthly by the Foreign Documents Division, Office of Central Reference, CIA, from lists received through the cooperation of US government agencies and includes translations prepared by such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (\*), and, when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

### REQUESTS FOR COPIES

Requests for copies of published projects should be made direct to the designated producing organization.

All requests for items prefixed by "CIA" should be addressed to Office of Central Reference, 2430 E Street, NW, Washington, D. C. 20505

Addresses of Producers to Follow:

ACIC - Aeronautical Chart and Information Center  
(see CFSTI)

ACSI - (see DIA)

AEC - Atomic Energy Commission (see CFSTI)

AERE Harwell Lib

The Librarian  
AERE, Ministry of Supply  
Harwell, Didcot, Birks  
England

AGI

American Geological Institute  
AGI Translations Office  
2101 Constitution Avenue, NW  
Washington, D.C. 20000

AGU

American Geophysical Union  
1515 Massachusetts Avenue, NW  
Washington, D.C. 20005

AIP

American Institute of Physics  
335 East 45th Street  
New York, New York 10017

ANL - Argonne National Laboratory, Illinois  
(see AEC)

APL - Applied Physics Laboratory (see Navy)

ATD - Aerospace Technology Division (see Library  
of Congress)

BISI

British Iron and Steel Industry Translation Service  
The Iron and Steel Institute  
4 Grosvenor Gardens  
London, S.W. 1, England

BuShips - Bureau of Ships (see Navy)

CB

Consultants Bureau Enterprises, Incorporated  
227 West 17th Street  
New York, New York 10011

CFSTI

Clearinghouse for Federal Scientific and  
Technical Information (Formerly Office of  
Technical Services)  
Port Royal and Braddock Roads  
Springfield, Virginia 22151

Dept of Interior

Department of Interior  
Department Library  
Foreign Documentation Section  
Washington, D.C. 20240

DIA

Defense Intelligence Agency  
Washington, D.C. 20301

DTMB - David Taylor Model Basin (see Navy)

FP

Faraday Press Publishers  
15 Park Row  
New York 38, New York

FSTC

Defense Documentation Center  
Cameron Station  
Alexandria, Virginia

FTD - Foreign Technology Division (see AF)

HB

Henry Bratcher Technical Translations  
P.O. Box 157  
Altadena, California 91001

IEEE

Institute of Electrical and Electronics Engineers  
275 Madison Avenue  
New York, New York 10016

JHU/APL - The Johns Hopkins University/Applied Physics  
Laboratory (see Navy)

JPRS

U. S. Department of Commerce  
Clearinghouse for Federal Scientific  
and Technical Information  
Joint Publications Research Service  
Building Tempo E,  
East Adams Drive, 4th & 6th Streets, SW  
Washington, D.C. 20443

MACM

Macmillan Company  
60 Fifth Avenue  
New York, New York 10011

Maritime Admin

Maritime Administration  
Office Services  
GAO, 5th and G Streets, NW  
Washington D. C.

Min of Aviat

Ministry of Aviation (Til) (b)  
Leysdown Road  
Motttingham  
London, S.E. 9, England

NASA

National Aeronautics and Space Administration  
1512 H Street, NW  
Washington, D.C. 20546

Navy

Department of Navy  
Office of Naval Intelligence  
Washington 25, D.C.

NLL

National Lending Library  
for Science & Technology  
Boston Spa, Yorkshire, England

NRL - Naval Research Laboratories (see Navy)

NSTIC

Naval Sci and Tech Intell Ctr

Department of the Navy  
CNO/ONI  
922 STIC  
Pentagon

ONI - Office of Naval Intelligence (see Navy)

ORNL - Oak Ridge National Laboratory (see AEC)

OTS - (see CFSTI)

Patent Office

Department of Commerce, Patent Office  
Scientific Library  
14th and Constitution Avenue, NW  
Washington, D.C.

Rand Corp

Rand Corporation  
ATTN: Publications Office  
1700 Main Street  
Santa Monica, California

RAPRA

Rubber and Plastics Research Association of  
Great Britain  
Shawbur  
Shrewsbury, England

RSIC - (see DDC/RSIC)

RTS - (see OTS)

SA

Seizaburo Aoki  
1069 Minami Nakadori 2-chome  
Fujisawa, Japan

SLAC - Stanford Linear Accelerator Center - (see AEC)

UCRL

University of California  
Lawrence Radiation Laboratory  
Livermore, California  
(see AEC)

USSR

Economic

New Construction Projects of the Five-Year Plan, 5 pp.  
RUSSIAN, per, Agitator, No 8, Apr 1966, pp. 31-35.  
JPRS 36069

The Program of Action of the People in the Fields of Automation, Telemechanics and Communications, 8 pp.  
RUSSIAN, per, Avtomatika, Telemekhanika i Svyaz, No 4, Apr 1966, pp. 1-3.  
JPRS 36104

Automation in Railroad Operations, by G. A. Krasovskiy, 9 pp.  
RUSSIAN, per, Avtomatika, Telemekhanika i Svyaz, No 4, Apr 1966, pp. 8-11.  
JPRS 36205

Transfer Short-Haul Freight from Rail to Motor Transport, by R. Stolov, 7 pp.  
RUSSIAN, per, Avtomobil'nyy Transport, No 4, Apr 1966, pp. 12-14.  
JPRS 36104

Pledges for the First Year of the Five-Year Plan in Azerbaydzhan, 5 pp.  
RUSSIAN, np, Bakinskiy Rabochiy, 18 May 1966, p. 1.  
JPRS 36069

Tasks of Construction Industry for New Five-Year Plan, 6 pp.  
RUSSIAN, per, Beton i Zhelezobeton, No 3, Mar 1966, pp. 1 & 2.  
JPRS 35965

Specialized Motor Transport for the Transportation of Reinforced Concrete Structures, 5 pp.  
RUSSIAN, per, Beton i Zhelezobeton, No 3, 1966, pp. 47-48.  
JPRS 35940

Problems of Mechanization of Accounts, by A. Pisarev, 11 pp.  
RUSSIAN, per, Bukhgalterskiy Uchet, No 4, Apr 1966, pp. 3-10.  
JPRS 36078

The Extension of Credit to Kolkhozes Is Expanding, 8 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 3-7.  
JPRS 35967

USSR

Economic (Contd)

The Increased Role of Credit in the Economy, by N. Barkovskiy, 14 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 15-23.  
JPRS 35967

Ways of Improving the Extension of Credits to Industry, by Ye. Mitel'man, 12 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 24-31.  
JPRS 35967

Interest Rates on Credit, by Prof. Yu. Shenger, 5 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 31-33.  
JPRS 35967

Control by the Bank through the Ruble, by I. Shrayber, 9 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 39-44.  
JPRS 35967

Credit and the Acceleration of Settlements, by I. Taflyva, 7 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 44-48.  
JPRS 35967

Summary of Conference on Actively Aiding the Development of Industry through Credit, 5 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 53.  
JPRS 35967

The Wishes of Economic Executives, 8 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 62-64.  
JPRS 35967

The Credit Method of Financing Capital Investments, by S. Tatur and E. Utkin, 9 pp.  
RUSSIAN, per, Dengi i kredit, No 1, 1966, pp. 80-83.  
JPRS 35967

Profitability and Credit, by Z. Atlas, 13 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 8-16.  
JPRS 35967

**USSR**  
**Economic (Contd)**

The Extension of Credit to Industry under the New Conditions, by M. Ingberman, 14 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 17-26.  
JPRS 35967

The Role of Credit under the Present Conditions, by N. Smirnov, 8 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 27-31.  
JPRS 35967

Profitability and Capital Return, by V. Ionov, 9 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 35-40.  
JPRS 35967

Unjustifiable Expenditures, by A. Stepanov, 5 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 53-56.  
JPRS 35967

Savings in the Armenian SSR, by V. Agasyan, 7 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 65-69.  
JPRS 35967

Questions and Answers, 6 pp.  
RUSSIAN, per, Dengi i kredit, No 2, 1966, pp. 82-84.  
JPRS 35967

Granting Credit to Trading Organizations, by P. Novoselov, 12 pp.  
RUSSIAN, per, Dengi i Kredit, No 3, 1966, pp. 8-15.  
JPRS 36018

The New Five-Year Plan and Economic Reform in Belorussia, by A. Nosilovskiy, 9 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 12, Mar 1966, pp. 9-10.  
JPRS 35893

The Five-Year Plans of the Soviet Republics, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, 12 Mar 1966, p. 3.  
JPRS 35990

**USSR**  
**Economic (Contd)**

Measures to Increase Production Efficiency in Minsk, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 12, Mar 1966, pp. 12-13.  
JPRS 36147

The New System of Planning and Economic Stimulation in the Road-Machinery Industry, by I. Dvinogortsev, 6 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 13, Apr 1966, p. 28.  
JPRS 35940

Industry in the Kirgiz SSR, by B. Mambetov, 15 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 15, Apr 1966, p. 2.  
JPRS 35963

Past Results and Present Task of the Coal Industry of the Ukraine, by N. Khudosovtsev, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 15, Apr 1966, p. 30.  
JPRS 35967

More Active Participation of Local Soviets in the National Economy Demanded, by A. Savin, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 17, Apr 1966, p. 12.  
JPRS 36014

An Interview with an Ossetin Leading Agriculturist, by V. Brun'ko, 5 pp.  
RUSSIAN, per, Ekonomicheskaya Gazeta, No 17, Apr 1966, p. 14.  
JPRS 36014

Temporary Instruction on the Procedure of Depositing the Capital Use Charge into the Budget, 9 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 17, Apr 1966, p. 32.  
JPRS 36078

Manpower Fluidity in Siberia, by Ye. Antosenkov, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, 17 Apr 1966, p. 34.  
JPRS 35986

Exhibition of Construction Equipment, by A. Gudimov, 11 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 17, Apr 1966, pp. 42-43.  
JPRS 36225

USSR  
Economic (Contd)

Steps to Encourage Economic Leadership in the Belorussian SSR, by D. Filimonov, 7 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 18, May 1966, pp. 4-5.  
JPRS 36106

"Mosenergo" First to Adopt New System of Planning and Economic Incentives, by Ye. Borisov, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 18, May 1966, p. 22.  
JPRS 36110

Specialization in the Machine-Tool Industry, by G. Fedorovskiy, 6 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 20, May 1966, p. 13.  
JPRS 36001

To Increase the Effectiveness of New Technology, by V. Aleksandrov and K. Mazanov, 10 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No 2, 1966, pp. 26-31.  
JPRS 36148

Improving Planning of the National Economy, by D. Erlikh, 9 pp.  
RUSSIAN, per, Ekonomika i Zhizn', No 2, Feb 1966, pp. 13-17.  
JPRS 35967

The Improvement of the Quality of Commodities Is An Important Reserve for the Growth of Accumulations, by V. Maslennikov, 10 pp.  
RUSSIAN, per, Finansy SSSR, No 4, Apr 1966, pp. 8-14.  
JPRS 36018

The Modernization of Standard Frameworks and Staffs in Enterprises Is a Very Important Affair, by A. Korovkin and B. Slovesnik, 8 pp.  
RUSSIAN, per, Finansy SSSR, No 4, Apr 1966, pp. 15-19.  
JPRS 35896

How Enterprise Profit Is Allotted in New Conditions, by G. Gravskiy, 10 pp.  
RUSSIAN, per, Finansy SSSR, No 4, Apr 1966, pp. 74-78.  
JPRS 35896

USSR  
Economic (Contd)

The Problems of Modernizing Financing, Credit and Accounts in Construction, by G. Podshivalenko and T. Rybakova, 7 pp.  
RUSSIAN, per, Finansy SSSR, No 4, Apr 1966, pp. 92-94.  
JPRS 36109

Hydroelectric Power Plant Construction Progressing, 5 pp.  
RUSSIAN, per, Gidrotekhnicheskoye Stroitel'stvo, No 3, Mar 1966, pp. 1-3.  
JPRS 35901

Economics of Hydro-Engineering Need Attention, by G. O. Levit, 6 pp.  
RUSSIAN, per, Gidrotekhnicheskoye Stroitel'stvo, No 3, Mar 1966, pp. 3-5.  
JPRS 35901

Tighten Railroad Operations in the Five-Year Plan, 5 pp.  
RUSSIAN, np, Gudok, 28 Apr 1966, pp. 1-2.  
JPRS 36123

Improving the Use of Traction Equipment, by V. Polulekh, 5 pp.  
RUSSIAN, np, Gudok, 14 May 1966, p. 3.  
JPRS 36104

Automation and Control of Economics in the Soviet Union, by G. Kazanskiy, 6 pp.  
RUSSIAN, np, Izvestiya, 26 Apr 1966, p. 3.  
JPRS 35971

Problems in Establishment of New Industrial Facilities in Riga, by M. Raman, 5 pp.  
RUSSIAN, np, Izvestiya, 29 Apr 1966, p. 3.  
JPRS 36078

Izvestiya Criticizes Role of Western Oil Interests, by B. Rachkov, 5 pp.  
RUSSIAN, np, Izvestiya, 24 May 1966, p. 2.  
JPRS 36009

Large-Scale Development of Land Improvement to Obtain High and Stable Yields of Grain and Other Agricultural Crops, by Ye. Ye. Aleksyevskiy, 25 pp.  
RUSSIAN, np, Izvestiya, 28 May 1966, pp. 3-5.  
JPRS 35878

USSR  
Economic (Contd)

Importance of Economic Effectiveness of Production, by S. Bayshev and T. Checheleva, 5 pp.  
RUSSIAN, np, Kazakhstanskaya pravda, 27 Mar 1966, p. 2.  
JPRS 35967

Party Intervention in Economic Affairs, by Z. Nuriyev, 11 pp.  
RUSSIAN, per, Kommunist, No 16, Nov 1965, pp. 59-67.  
JPRS 36249

The New Stage in the Economic Development of the USSR, by N. Baybakov, 13 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 26-36.  
JPRS 36051

Improving the System of Prices and Price Setting in the USSR, by V. D'yachenko, 16 pp.  
RUSSIAN, per, Kommunist, 10 May 1966, pp. 54-65.  
JPRS 36051

Statistics and the Economic Reform, by B. Kolpakov, 10 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 66-72.  
JPRS 36051

The Struggle of the Proletariat for Participation in Enterprise Management, by V. Usenin, 11 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 96-104.  
JPRS 36051

A Meeting of Sovkhoz Directors in Armenia, 5 pp.  
RUSSIAN, np, Kommunist, 15 May 1966, p. 3.  
JPRS 36099

Depreciation, by L. Shernazarov, 5 pp.  
RUSSIAN, np, Kommunist Tadzhikistana, 18 Mar 1966, p. 3.  
JPRS 35967

Economic Problems of Kolkhoz Production in Tadzhikistan, by Sh. Bazarov, 5 pp.  
RUSSIAN, np, Kommunist Tadzhikistana, 11 May 1966, pp. 2-3.  
JPRS 36116

USSR  
Economic (Contd)

Use of Irrigation in Growing Cotton and Other Crops in the Uzbek SSR, by N. Matchanov, 8 pp.  
RUSSIAN, per, Kommunist Uzbekistana, No 2, 1966, pp. 17-24.  
JPRS 36014

A Change in Proportions, by Yu. Sadokhin, 6 pp.  
RUSSIAN, np, Krasnaya Zvezda, 11 May 1966, pp. 2-3.  
JPRS 35902

Proposed Reconstruction of the Kirov Plant in Leningrad, by V. Aleksandrov, 6 pp.  
RUSSIAN, np, Leningradskaya Pravda, 13 Mar 1966, p. 2.  
JPRS 36258

Professor Liberman on Profit Incentive, by Yevsey Liberman, 9 pp.  
RUSSIAN, np, Literaturnaya Gazeta, 5 Mar 1966, pp. 1 & 4.  
JPRS 35967

New Construction and Road-Building Machines by A. Ye. Volkova, 13 pp.  
RUSSIAN, per, Mekhanizatsiya Stroitel'stva, No 2, Feb 1966, pp. 14-18.  
JPRS 35940

Plans for Improving Equipment and Methods of Production in the Construction Industry, 5 pp.  
RUSSIAN, per, Mekhanizatsiya Stroitel'stva, No 4, Apr 1966, pp. 1-3.  
JPRS 36117

The Dairy Industry in the New Five-Year Plan, 5 pp.  
RUSSIAN, per, Molochnaya Promyshlennost', No 4, Apr 1966, pp. 1-3.  
JPRS 36018

The Maritime Fleet and the Five-Year Plan, 9 pp.  
RUSSIAN, per, Morskoy Flot, No 4, Apr 1966, pp. 1-3.  
JPRS 36258

Services to Merchant Seamen Expanding, 5 pp.  
RUSSIAN, per, Morskoy Flot, No 4, Apr 1966, pp. 4-5.  
JPRS 36258

USSR  
Economic (Contd)

Harbor Passenger Fleets should Operate Profitably, by L. Pikul', 5 pp.  
RUSSIAN, per, Morskoy Flot, No 4, Apr 1966, pp. 10-11.  
JPRS 36258

The Reliability of Communications Equipment from an Economic Viewpoint, by H. Weiher, 13 pp.  
GERMAN, per, Nachrichtentechnik, Vol 16, No 2, Feb 1966, pp. 46-49.  
JPRS 36120

Scientific Work Organization at Irtysh Polymetallic Combine, by N. Stepanov, 12 pp.  
RUSSIAN, per, Narodnoye Khozyaystvo, No 1, 1966, pp. 47-51.  
JPRS 36015

Construction Material Shortages in the Kazakh SSR, by B. Parimbetov, 6 pp.  
RUSSIAN, per, Narodnoye Khozyaystvo Kazakhstana, No 3, 1966, pp. 24-28.  
JPRS 36109

One-Man Authority and the Collective, by Yu. Svyadoshch, 8 pp.  
RUSSIAN, per, Narodnoye Khozyaystvo Kazakhstana, No 3, 1966, pp. 65-69.  
JPRS 36259

Good Management at Leninogorsk Polymetallic Combine Shows Results, by I. Vasil'chev, 8 pp.  
RUSSIAN, per, Narodnoye Khozyaystvo Kazakhstana, No 3, Mar 1966, pp. 74-77.  
JPRS 36259

Organization of Construction in the Oil Industry, by G. D. Sokolov.  
RUSSIAN, bk, Organizatsiya Stroitel'stva Neftnykh Promyslov, 1965, 192 pp.  
NLL R 39959

Adjustment of the Norm of Profitability, by Ye. Liberman, 11 pp.  
RUSSIAN, per, Planovoye Khozyaystvo, No 3, Mar 1966, pp. 28-36.  
JPRS 35967

Problems and Reserves in Urban Construction, by M. Dudin, 10 pp.  
RUSSIAN, per, Planovoye Khozyaystvo, No 3, 1966, pp. 46-53.  
JPRS 35965

USSR  
Economic (Contd)

Territorial Planning of the Economy under the New Conditions, by S. Tokarev, 10 pp.  
RUSSIAN, per, Planovoye Khozyaystvo, No 5, May 1966, pp. 15-22.  
JPRS 36078

Water As a Factor in the Location of the Chemical Industry, by N. Alisov, 9 pp.  
RUSSIAN, per, Planovoye Khozyaystvo, No 5, May 1966, pp. 88-92.  
JPRS 36275

The Progress of Soviet Economy - On the Fulfilment of the State Plan for the Development of the National Economy of the USSR in 1965 - The USSR Central Statistical Board's Report.  
RUSSIAN, np, Pravda, (34) Feb. 3 1966, pp 1-2.  
N.L.L. Shelf mark: 0131.3

Distribution of Productive Forces in the USSR, by N. Nekrasov, 5 pp.  
RUSSIAN, np, Pravda, 19 Apr 1966, p. 2.  
JPRS 35963

Importance of Economic Initiative, by L. Leont'yev, 7 pp.  
RUSSIAN, np, Pravda, 29 Apr 1966, p. 2.  
JPRS 35963

Large-Scale Development of Land Improvement to Obtain High and Stable Yields of Grain and Other Agricultural Crops, 11 pp.  
RUSSIAN, np, Pravda, 19 June 1966, pp. 1-2.  
JPRS 36253

New Automotive Repair Methods in Armenian SSR, by V. Saakvan, 5 pp.  
RUSSIAN, per, Promyshlennost' Armenii, No 12, Dec 1965, pp. 30-32.  
JPRS 36035

Powder Metallurgy Production in Armenia, by N. Manukyan, 5 pp.  
RUSSIAN, per, Promyshlennost' Armenii, No 1, 1966, pp. 8-10.  
JPRS 36154

A Program for Track Maintenance on the Soviet Railroads, by I. V. Rusakov, and L. P. Stryukov, 7 pp.  
RUSSIAN, per, Put' i putevoye khozyaystvo, No 4, 1966, pp. 1-4.  
JPRS 35937

USSR  
Economic (Contd)

A Discussion Concerning the Delays in Construction of New Diesel Locomotives, by A. Karavanov and V. Knyazyuk, 8 pp.  
RUSSIAN, np, Rabochaya Gazeta, 14 May 1966, p. 2.  
JPRS 36104

State of Grain Production in Kazakhstan, 7 pp.  
RUSSIAN, per, Sel'skoye Khozyaystvo Kazakhstana, No 4, Apr 1966, pp. 4-5.  
JPRS 36116

Economic Reform in the USSR and the Nonvalidity of Its Criticisms, by B. Gel'bras, 10 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 3, 1966, pp. 57-63.  
JPRS 36079

Centralized Planning and the Independence of the Enterprises, by Kh. Myuyur, 6 pp.  
RUSSIAN, np, Sovetskaya Estoniya, 22 Mar 1966, pp. 2 & 3.  
JPRS 35967

Development of the Activity of the Consumer's Cooperatives during 1959-1965, by A. Balashov, 12 pp.  
RUSSIAN, per, Sovetskaya Potrebital'skaya Kooperatsiya, No 3, 1966, pp. 28-33.  
JPRS 36018

An Interview with K. M. Gerasimov, Chairman of the State Planning Commission RSFSR, 5 pp.  
RUSSIAN, np, Sovetskaya Rossiya, 17 Mar 1966, p. 2.  
JPRS 35967

Developing Scientific-Theoretical Principles for the Unification and Standardization of Unit-Head Machine Tool Building, by G. A. Kiselev, Yu. A. Vengorovskiy and V. Yu. Gulenkov, 13 pp.  
RUSSIAN, per, Standarty i kachestvo, No 3, 1966, pp. 8-14.  
JPRS 36169

The Introduction of Diamond Tools Into the National Economy of the USSR, by G. M. Ippolitov, 6 pp.  
RUSSIAN, per, Stanki i Instrument, No 3, 1966, pp. 3-4.  
JPRS 36105

Types of Classification Stations and Conditions Governing Their Use,  
RUSSIAN, rpt. Stantsii i Usly.  
\* MSI J-0133  
IU 2204030866

USSR  
Economic (Contd)

Planning Schemes for Agricultural Regions, by V. Borisov, 5 pp.  
RUSSIAN, np, Stroitel'naya Gazeta, 3 Apr 1966, p. 2.  
JPRS 35875

Plans for Transport Construction during the Five-Year Plan, by Ye. Kozhevnikov, 8 pp.  
RUSSIAN, np, Stroitel'naya Gazeta, 24 Apr 1966, pp. 1-2.  
JPRS 36104

The Utilization of Aluminum in Cranes, by I. Kosorukov, 5 pp.  
RUSSIAN, np, Stroitel'naya Gazeta, 29 May 1966, p. 4.  
JPRS 36225

New Transport Vehicles for Pipeline Construction, by Yu. V. Shvedov, 5 pp.  
RUSSIAN, per, Stroitel'stvo Truboprovodov, No 4, Apr 1966, pp. 15-18.  
JPRS 36038

Program of Technical Progress, 9 pp.  
RUSSIAN, per, Tekhnika v sel'skom khozyaystve, No 3, 1966, pp. 1-5.  
JPRS 35893

The Application of Synthetic Diamonds in the Lugansk Kiesel-Locomotive-Building Plant, by Yu. M. Yepikhia, et al, 8 pp.  
RUSSIAN, per, Tekhnologiya i Organizatsiya Proizvodstva, No 2, Mar-Apr 1966, pp. 50-54.  
JPRS 36016

A New System of Controlling Production.  
RUSSIAN, per, Tekhnicheskaya Promyshlennost, No 12, 1965, pp. 1-4.  
NLL Shelfmark: 0177 Holding 1942-

Analysis of the Weight Distribution of Axles of Wheeled Tractor, by D. I. Mel'nikov, 5 pp.  
RUSSIAN, per, Traktory i Sel'khoz mashiny, No 3, Mar 1966, pp. 14-15.  
JPRS 36019

Scientific Basis Required for Development of Agricultural Implement Building, by V. I. Lozovoy, 8 pp.  
RUSSIAN, per, Traktory i Sel'khoz mashiny, No 3, Mar 1966, pp. 18-20.  
JPRS 36019

USSR  
Economic (Contd)

Plan for Improving the Instrument-Making Industry, by V. I. Mishchenko and L. M. Mampel, 6 pp.  
RUSSIAN, per, Traktory i Sel-mashiny, NO 3, Mar 1966, pp. 42, 43, 44.  
JPRS 36019

The Program for Transportation Builders in the New Five-Year Plan, 6 pp.  
RUSSIAN, per, Transportnoye stroitel'stvo, No 4, Apr 1966, pp. 1-3.  
JPRS 35937

Optimal Management of the National Economy and Problems of Economic Cybernetics, by V. S. Dadayan, 9 pp.  
RUSSIAN, per, Vestnik Moskovskogo Universiteta, No 1, Jan-Feb 1966, pp. 52-59.  
JPRS 35990

State Statistics under the New Conditions, by V. Starovskiy, 12 pp.  
RUSSIAN, per, Vestnik statistiki, No 1, 1966, pp. 3-13.  
JPRS 36121

The USSR -- A Major Seapower, 11 pp.  
RUSSIAN, np, Vodnyy transport, 26 Apr 1966, p. 2.  
JPRS 35937

The Present Stage of Organization and Planning of Material-Technical Supply, by V. Ivanov, 7 pp.  
RUSSIAN, np, Voprosy Ekonomiki, 1966, No 2, pp. 61-66.  
JPRS 35902

The Unity of State Technical Policy, by G. Anisimov, 16 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 3, Mar 1966, pp. 11-23.  
JPRS 36078

The Contemporary Stage of the Construction of Socialism in European Countries of the People's Democracy, by N. Stolpov, 12 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 3, Mar 1966, pp. 75-83.  
JPRS 36070

Foreign Economic Problems of the Non-Capitalist Development of Liberated Countries, by L. Levin, 10 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 3, Mar 1966, pp. 84-91.  
JPRS 36070

USSR  
Economic (Contd)

The Economic Effectiveness of Irrigated Agriculture in European Member-Countries of the Council of Economic Mutual Assistance, by Yu. Shintyapin, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 3, Mar 1966, pp. 114-118.  
JPRS 36070

Methods of Protecting Food, Water, Livestock, Forage and Water Sources, by A. Mil'skiy, 9 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 4, Apr 1966, pp. 24-26.  
JPRS 36044

Information about a Meeting of the Board of the Ministry of Agriculture RSFSR about Resources in Northern Regions of the Republic, by S. Bykov, 6 pp.  
RUSSIAN, per, Zakupki Sel'skokhozyaystvennykh Produktov, No 4, 1966, pp. 19-21.  
JPRS 36014

New Regional Foundries in the USSR, by V. S. Belov, S. I. Chetvarukhin, V. S. Knorre and G. M. Sakharov, 11 pp.  
POLISH, per, Przegląd Odlewnictwa, No 4, Apr 1966, pp. 116-121.  
JPRS 36098

Political

Soviet Press Propaganda Concerning Introduction of Advanced Experience, 6 pp.  
RUSSIAN, per, Ekonomicheskaya Gazeta, No 18, May 1966, p. 9.  
JPRS 36106

Commentators Discuss Shaky US Pact System, by Vladimir Kudryavtsev, 9 pp.  
RUSSIAN, np, Izvestiya, 24 Apr 1966.  
JPRS 35985

USA -- Stronghold of Reaction, by N. Yakovlev, 5 pp.  
RUSSIAN, np, Izvestiya, 27 Apr 1966, p. 3.  
JPRS 35985

African Political Parties Described in the Soviet Press, by V. Midtsev, 5 pp.  
RUSSIAN, np, Izvestiya, 17 May 1966, p. 5.  
JPRS 36300

USSR  
Political (Contd)

Amendments to the Bylaws of the CPSU and Intra-Party Life, 11 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 3-11.  
JPRS 36051

Leninism Is the Scientific Basis of Soviet Foreign Policy, by N. Inozemtsev, 15 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 12-25.  
JPRS 36051

Reclamation Is a Major Reserve of the Non-chernozem Zone, by N. Kalmyk, 10 pp.  
RUSSIAN, per, Kommunist, 10 May 1966, pp. 37-45.  
JPRS 36051

The Height of the Racket, by M. Vistinetskiy, 11 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 113-121.  
JPRS 36051

The Foreign Policy Principles of the CPSU, by S. Titarenko, 7 pp.  
RUSSIAN, np, Krasnaya Zvezda, 28 Apr 1966, pp. 2-3.  
JPRS 36057

The Policy of the CPSU in a Contemporary World, by T. Vladimirov, 18 pp.  
RUSSIAN, per, Mirovaya Ekonomika i Mezhdunarodnyye Otnosheniya, No 5, 1966, pp. 3-14.  
JPRS 36119

Soviet View of the Current Political Situation in Syria, by I. Belyayev and Ye. Primakov, 5 pp.  
RUSSIAN, np, Pravda, 2 June 1966, p. 3.  
JPRS 36085

The Social Content and Political Form in the Non-Capitalist Development of Young States, by G. B. Starushenko, 11 pp.  
RUSSIAN, per, Sovetskoye gosudarstvo i provo, No 4, Apr 1966, pp. 103-112.  
JPRS 36057

Fulfillment of the Decisions of the 23rd Party Congress, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 4, Apr 1966, pp. 5-6.  
JPRS 36044

USSR  
Political (Contd)

Moscow Seen Preparing Changing of Guard in Europe, by David Rousset, 35 pp.  
FRENCH, np, Le Figaro, 8 Jun 1966, pp. 1 & 32.  
JPRS 36230

Octobre: CPSU Leaders Collaborate Increasingly with Imperialism, 5 pp.  
FRENCH, per, Octobre, No I, 8 Apr 1966, pp. 1-6.  
JPRS 36119

Interpretation by Ukrainian Emigre Organization "Prologue" of Arrests of Two Ukrainian Writers I. Svitlychnyy and I. Dzyuba, 8 pp.  
UKRAINIAN, per, Suchasnist, No 5, May 1966, pp. 119-124.  
JPRS 36039

Military

Searching for and Attacking Slow-Moving Air Targets, by A. Pushkin, 8 pp.  
RUSSIAN, per, Aviatsiya i Kosmonavtika, No 5, 1966, pp. 41-45.  
JPRS 36065

Studies in Engineering Support of Combined-Arms Combat, by V. Ya. Plyaskin, I. F. Lysukhin, and V. A. Ruvinskiy, 40 pp.  
RUSSIAN, bk, Inzhenernoye Obespecheniye Obshchevoyskovogo Boya, pp. 3-6, 345-370, and 371-372.  
JPRS 36040

Flight Testing of Aircraft, by M. G. Kotik, et al.  
RUSSIAN, rpt, Letnyye Ispytaniya Samoletov, 1965, 330 pp.  
\*NACA TT A-442

Interview with Col Gen Zyryanov, Chief of the Soviet Border Forces, by E. Tserkover and A. Sfliyenkov, 5 pp.  
RUSSIAN, np, Nedelya, No 22, 22-28 May 1966, p. 6.  
JPRS 36086

Methods of Protection against Nuclear Chemical, and Bacteriological Weapons, by N. S. Pokrovskiy, 103 pp.  
RUSSIAN, bk, Sposoby Zashchity ot Yadernogo, Khimicheskogo i Bakteriologicheskogo Oruzhiya, 1965, pp. 1-127.  
JPRS 35870

USSR  
Military (Contd)

Firing With Rangefinder, by I. T. Kuznetsov,  
47 pp.  
RUSSIAN, rpt, Strel'ba s Dal'nomerom,  
1962.  
ACSI I-9946  
ID 2204008766

Millions of Operations Per Second, by N. Zubkov.  
8 pp.  
RUSSIAN, per, Voyennyye Znaniya, 1965, pp 34-35.  
9700957  
FTD-HT-65-188

Logistic Support of Civil Defense Units in  
the Field, by V. Ol'shevskiy, 5 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 4, Apr  
1966, p. 19.  
JPRS 36044

Civil Defense Plan in a Kolkhoz, by M.  
Shutov, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 4, Apr  
1966, pp. 20-21.  
JPRS 36044

Organization of Radiation Monitoring Posts,  
by V. Medvedev, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 4, Apr  
1966, pp. 27-28.  
JPRS 36044

Collection of Problems on the Principles  
of Firing Rifles, Tank, Artillery,  
and Rocket Weapons, by A. A. Lovi,  
S. S. Mutsynov, N. A. Shevchenko, 139 pp.  
RUSSIAN, rpt, Zadachnik po Osnovam Strelby iz  
Strelkovogo, Tankovogo, Artilleriyskogo i  
Raketskogo Oruzhiya 1964, pp 3-184.  
ACSI I-9797  
ID 2204007066

USSR  
Geographic

Chronicles,  
RUSSIAN, per, Iz Vsesoyuznogo Geograficheskogo  
Obshchestva, Tom 98, Vyp 1, Jan-Feb 1966,  
pp 92-99.  
\*ACSI J-0104  
ID 2204030466

Moscow, a Tourist's Guide 2d. ed.  
by V. Chernov, V. Mazov.  
RUSSIAN, bk, Moskva, Spravochnik  
diya Turista, 1963.  
Dept of Inter No  
320.46edc M851m

On Geographical-Cartographical and Geological  
Operations in Area Selection for New  
Industrial Construction, by N. Ya. Kondrat'yeva.  
17 pp.  
RUSSIAN, per, Vestnik Leningradskogo  
Universiteta, No 24, 1964, pp 99-105.  
ACSI I-9347A  
ID 2204014866

Review of Cartographic Projection  
Classifications, by A. A. Pavlov.  
17 pp.  
RUSSIAN, per, Vestnik Leningradskogo  
Universiteta, No 24, 1964, pp 145-153.  
ACSI I-9347B  
ID 2204014866

The question of the Formation of the Zooplank-  
ton of the Uchinskoe Reservoir of the Moscow  
Canal, by E. V. Borutskiy.  
RUSSIAN, per, Zool Zhur, Vol XXVIII, No 1, 1949,  
pp 71-78.  
NLL RTS-2995

USSR  
Sociological

Advantages and Peculiarities of the Five-Day Work Week, by Ye. Kapustin, 6 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 18, May 1966, pp. 34-35.  
JPRS 36198

The Foreman, by I. Strogov, 11 pp.  
RUSSIAN, per, Kommunist, 10 May 1966, pp. 46-53.  
JPRS 36051

A Broad Anti-Monopolistic Front, by V. Sergeyev, 13 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 85-95.  
JPRS 36051

The Country Workers against the Monopolies, by S. Nadel', 9 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 105-112.  
JPRS 36051

A New Book on the Workers Class: Its Virtues and Shortcomings, by G. Pasternak, 5 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 125-128.  
JPRS 36051

Measures for Eliminating Shortcomings in Payment of Wages to Kolkhoz Members, by I. Asrorov, Z. Abdullayev and E. Sharipov, 5 pp.  
RUSSIAN, np, Kommunist Tadzhikistana, 4 May 1966, p. 3.  
JPRS 35959

Product Quality As a New Index of Labor Productivity, by L. Blyakhman, 6 pp.  
RUSSIAN, np, Leningradskaya Pravda, 25 Mar 1966.  
JPRS 36148

The Efficiency of Scientific Work, by P. Kapitsa, 5 pp.  
RUSSIAN, per, Literaturnaya gazeta, 5 Mar 1966, p. 2.  
JPRS 35899

For a Revised Evaluation of Labor of Miners and Metallurgists, by I. Nikiforov, 9 pp.  
RUSSIAN, per, Narodnoye Khozyaystvo Kazakhstana, No 3, 1966, pp. 43-47.  
JPRS 36259

USSR  
Sociological (Contd)

Ritualism in Islam and Its Social Essence, by A. Alimukhamedov, 9 pp.  
RUSSIAN, per, Obshchestvennyye nauki v Uzbekistane, No 3, 1966, pp. 16-21.  
JPRS 36112

Computation of Temporary Incapacity Benefits for Agricultural Workers, by Yu. Grigor'yev, 9 pp.  
RUSSIAN, per, Okhrana Truda i Sotsial'noye Strakhovaniye, No 4, Apr 1966, pp. 29-31.  
JPRS 35959

Need for Increasing the Protection of Socialist Property, by K. Pavlishchev, 9 pp.  
RUSSIAN, per, Sotsialisticheskaya Zakonnost', No 3, Mar 1966, pp. 3-8.  
JPRS 36200

Eliminating Violations of Labor Legislation in Sovkhozes, by N. Vishnevetskaya, 6 pp.  
RUSSIAN, per, Sotsialisticheskaya Zakonnost', No 3, Mar 1966, pp. 9-12.  
JPRS 36200

New Demands for Labor Law, by K. Abzhanov, 5 pp.  
RUSSIAN, per, Sotsialisticheskaya Zakonnost', No 3, Mar 1966, pp. 13-16.  
JPRS 36200

Vital Problems of Labor Statistics under the New Conditions and the Tasks of Enterprises, by L. Volodarskiy, 10 pp.  
RUSSIAN, per, Sotsialisticheskii Trud, No 3, 1966, pp. 43-49.  
JPRS 36079

Materials and Research on the Ethnography and Anthropology of Asian Countries, by N. N. Cheboksarov, 11 pp.  
RUSSIAN, per, Sovetskaya etnografiya, No 2, Mar-Apr 1966, pp. 50-58.  
JPRS 35983

Profitable Investments in Public Education, by L. I. Tul'chinskiy, 14 pp.  
RUSSIAN, per, Sovetskaya pedagogika, No 2, Feb 1966, pp. 72-80.  
JPRS 35967

The Structure and Functions of Trade Unions, by I. Gudkov, 7 pp.  
RUSSIAN, per, Sovetskiye Profsoyuzy, No 4, 1966, pp. 34-35.  
JPRS 36079

USSR  
Sociological (Contd)

Teaching Methods Used to Form Firm Atheistic Convictions in Soviet Students, 10 pp.  
USSR, per, Sredneye Spetsial'noye Obrazovaniye, No 1, 1966, pp. 40-44.  
JPRS 36058

Repressions against Literary Figures in the Ukraine, by Bohdan Kravtsiv, 10 pp.  
UKRAINIAN, per, Suchasnist', No 5, May 1966, pp. 3-10.  
JPRS 35975

An Important School of Management, by I. M. Vladychenko, 5 pp.  
RUSSIAN, np, Trud, 27 Mar 1966, p. 1.  
JPRS 35967

Discussion of the Tasks Facing Soviet Trade Unions, 10 pp.  
RUSSIAN, np, Trud, 27 Apr 1966, pp. 2-3.  
JPRS 36081

Decree Outlines Plans to Strengthen the Role of Trade Unions, 10 pp.  
RUSSIAN, np, Trud, 29 Apr 1966, p. 2.  
JPRS 36081

Deceptiveness in Grading of Students Scored, 6 pp.  
RUSSIAN, np, Uchitel'skaya Gazeta, 13 Jan 1966, pp. 1 & 3.  
JPRS 35866

Pros and Cons Concerning Value of Differentiation in Educational Work, by V. Strezikozin, 5 pp.  
RUSSIAN, np, Uchitel'skaya Gazeta, 15 Jan 1966, pp. 2-3.  
JPRS 35866

Compulsory General Secondary Education the Goal for 1970, by V. Zhamin, 5 pp.  
RUSSIAN, np, Uchitel'skaya Gazeta, 27 Jan 1966, p. 1.  
JPRS 35866

Second Plenum of Central Committee of Trade Union of Workers of Education, Higher Schools, and Scientific Institutions, 5 pp.  
RUSSIAN, np, Uchitel'skaya Gazeta, 15 Feb 1966, pp. 2-3.  
JPRS 35866

USSR  
Sociological (Contd)

New Prospects in Higher Education, by V. P. Yelyutin, 8 pp.  
RUSSIAN, per, Vestnik Vysshey Shkoly, No 1, Jan 1966, pp. 3-8.  
JPRS 35894

Furthering Economic Studies in Agricultural Education, by N. F. Bugayev, 6 pp.  
RUSSIAN, per, Vestnik Vysshey Shkoly, No 1, Jan 1966, pp. 9-12.  
JPRS 35894

Improving Advanced Study Correspondence Programs in Agricultural Institutions, by A. I. Kornev, 6 pp.  
RUSSIAN, per, Vestnik Vysshey Shkoly, No 1, Jan 1966, pp. 17-20.  
JPRS 35894

Mathematical Training of Economists and Planning Engineers, by L. V. Kantorovich and A. G. Pinsker, 8 pp.  
RUSSIAN, per, Vestnik Vysshey Shkoly, No 3, Mar 1966, pp. 22-27.  
JPRS 36277

All-Union Scientific Conference on Problems of Formation of the Population and Use of Labor Resources in Regions of the Far North, by L. Sbytova, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 2, Feb 1966, pp. 150-153.  
JPRS 35964

The Patrice Lumumba University of Friendship of Peoples, by V. L. Kerov, 11 pp.  
RUSSIAN, per, Voprosy Istorii, No 1, 1966, pp. 164-170.  
JPRS 35966

An Introduction to the Art of Translating Scientific and Technical Literature into English, by A. L. Pumpyskiy, 19 pp.  
RUSSIAN, rpt, Vvedeniye v Praktiku Perevoda Nauchnoy i Tekhnicheskoy Literatury na angliyskiy yazyk Moscow, 1965, pp. 3-31; 289-293.  
ACSI I-9869  
ID 2204008066

Eastern Europe

Economic

Democratic Centralism -- A Basic Principle for the Direction of the National Economy, by Hasan Banja, 5 pp.  
ALBANIAN, np, Bashkimi, 5 May 1966, pp. 2-3.  
JPRS 35905

Report to Writers Union Plenum on the Development and Problems of Prose, by Sterjo Spasse, 10 pp.  
ALBANIAN, np, Drita, 24 Apr 1966, pp. 1,2.  
JPRS 35905

Comment on 1966 Plan, 13 pp.  
ALBANIAN, per, Ekonomia Popullore, No 2, Mar-Apr 1966, pp. 3-13.  
JPRS 36071

Simplification and Improvement of Planning Methods in the National Economy, by Abdyl Backa, 16 pp.  
ALBANIAN, per, Ekonomia Popullore, No 2, Mar-Apr 1966, pp. 14-27.  
JPRS 36071

Democratic Centralism and Initiative in Planning the National Economy, by Priamo Bollano, 12 pp.  
ALBANIAN, per, Ekonomia Popullore, No 2, Mar-Apr 1966, pp. 28-40.  
JPRS 36071

Enterprises Urged to Heed Criticism Appearing in Press, 5 pp.  
ALBANIAN, np, Zeri i Popullit, 23 Apr 1966, p. 2.  
JPRS 35905

Plans for the Development of Foreign Trade During 1966, 6 pp.  
ALBANIAN, np, Zeri i Popullit, 23 Apr 1966, p. 3.  
JPRS 35905

Measures for Increasing Domestic Resources of Socialist Accumulation and Utilizing Them Properly, by Iljaz Fishta and Sabah Hilmia, 6 pp.  
ALBANIAN, np, Zeri i Popullit, 13 May 1966, pp. 2-3.  
JPRS 36235

Taxes as an Economic Lever Under Socialism, by Georgi Petrov,  
BULGARIAN, bk, Danutsite Kato Ikonomicheski Lost Pri Sotsializma, Booklet No 7 of the Biblioteka "Problemi na Novata Sistem na Planirane i Rukovodstvo na Narodnoto Stopanstvo, 1966, pp 3-13.  
\*JPRS/ST-4296

Eastern Europe  
Economic (Contd)

Organization and Functions of the Ministry of Architecture and Urbanization, 8 pp.  
BULGARIAN, per, Durzhaven vestnik, No 41, 27 May 1966, pp. 1-3.  
JPRS 36132

Financing and Crediting of Socialist Enterprises, by Dimitur Bazhdarov,  
BULGARIAN, bk, Finansirane i Kreditirane na Sotsialisticheskite Predpriyatiya, Booklet No 4 of the Biblioteka "Problemi na Novata Sistem na Planirane i Rukovodstvo na Narodnoto Stopanstvo, 1966, pp 3-77.  
\*JPRS/DC-12487

The Navigable Canal between Varna and Devnya, by Marin Devedzhiev, 7 pp.  
BULGARIAN, per, Geografiya, No 3, Apr 1966, pp. 1-4.  
JPRS 35997

Changes in the System of Indicators and the System and Methods of Planning, by Grisha Filipov,  
BULGARIAN, bk, Izmeneniya v Sistem na Pokazateli v Rada i Metodite na Planirane, Booklet No 1 of the Biblioteka "Problemi na Novata Sistem na Planirane i Rukovodstvo na Narodnoto Stopanstvo, 1966, pp 4-131.  
\*JPRS/NY-13341

Possibilities of Improving the Planning and Management of the Chemical Industry, by St. Gazenov, 7 pp.  
BULGARIAN, per, Khimiya i Industriya, XXXVIII, No 1, 1966, pp. 1-3.  
JPRS 36083

The Plan for New Successes in the Bulgarian Food Industry, by Atanas Dimitrov, 8 pp.  
BULGARIAN, per, Khranitelna promishlenost, No 1, Jan 1966, pp. 1-4.  
JPRS 36007

Development of Independence in Enterprises under the New System of Planning and Economic Management, by Yordan Iliev, 5 pp.  
BULGARIAN, per, Khranitelna promishlenost, No 1, 1966, pp. 11-13.  
JPRS 35860

A Suggestion to Improve the New System of Planning and Management, 6 pp.  
BULGARIAN, per, Khranitelna promishlenost, No 1, Jan 1966, pp. 27-28.  
JPRS 35860

Eastern Europe  
Economic (Contd)

Economic Relations between Bulgaria and the Developing Countries, by Stefan Sharenkov, 11 pp.  
BULGARIAN, per, Partien zhivot, No 5, Apr 1966, pp. 85-90.  
JPRS 36088

Production Assets of the Industrial Enterprise under the New System of Planning and Management, by Georgi Krumov, 8 pp.  
BULGARIAN, per, Politicheska prosveta, No 3, Mar 1966, pp. 29-35.  
JPRS 36134

Production Relations and Contractual Relations in the National Economy, by Docent Boris Purvulov and Docent Vitali Tadzher, BULGARIAN, bk, Proizvodstveni Vruzki i Dogovorni Otnosheniya v Narodnoto Stopanstvo, Booklet No 6 of the Biblioteka "Problemi na Novata Sistem na Planirane i Rukovodstvo na Narodnoto Stopanstvo," 1966, pp 6-98.  
\*JPRS/SF-4296

Some Problems Relating to Tax Payments under the New System of Planning and Management in the National Economy, by Yanko Yanev, 6 pp.  
BULGARIAN, per, Schetovodstvo i kontrol, No 1, Jan-Feb 1966, pp. 12-16.  
JPRS 36247

Some Problems in Crediting Related to the New System of Planning and Management of the National Economy, by Delcho Sapundzhiev, 16 pp.  
BULGARIAN, per, Schetovodstvo i kontrol, No 2, Mar 1966, pp. 15-25.  
JPRS 35860

Bulgarian Economic Development in Foreign Trade in 1965, by Georgi Yankov, 8 pp.  
BULGARIAN, per, Vunshna turgoviya, No 4, Apr 1966, pp. 6-9.  
JPRS 36003

The Foreign Exchange Problems of Joint Enterprises of the Socialist Countries, by Georgi Danov, 10 pp.  
BULGARIAN, per, Vunshna turgoviya, No 4, Apr 1966, pp. 9-13.  
JPRS 36003

Supplementary Protocol to the Trade and Payments Agreement between Bulgaria and Turkey of 23 February 1955, 16 pp.  
BULGARIAN, per, Vunshna turgoviya, No 4, Apr 1966, pp. 20-26.  
JPRS 36003

Eastern Europe  
Economic (Contd)

The Internal Economic Account in an Industrial Enterprise, by Emil Khristov, BULGARIAN, bk, Vutreshnata Stopanska Smetka V Promishlenoto Predpriyatiye, Booklet No 2, of the Biblioteka "Problemi na Novata Sistem na Planirane i Rukovodstvo na Narodnoto Stopanstvo," 1966, pp 3-126.  
\*JPRS/DC-12487

Technical and Economical Factors of the State and Development of Yugoslav Shipbuilding Industry, by Otokar Kohout, CROATIAN, per, Brodogradnja, No 1, 1966, pp 1-8.  
\*ACSI J-0103  
ID 2204030366

French Shipbuilding Industry in 1965, CROATIAN, per, Brodogradnja, No 1, 1966, pp 28-30.  
\*ACSI J-0103  
ID 2204030366

Scientific, Technological and Economic Bases for the Management of Agricultural Production, by J. Burian, 15 pp.  
CZECH, per, Ekonomika Zemedelstvi, No 4, Apr 1966, pp. 77-80.  
JPRS 36072

Design and Erection of a Large-Span Bridge Concreted Without Scaffolding in Cantilever Manner, by T. Bartkova, M. Almer, CZECH, per, Inzenyrskie Stavby, April 1965, \*ACSI J-0105  
ID 2204030566

The Use of Coupled Screw Jacks for the Lifting of a Road Bridge, by F. Liska, CZECH, per, Inzenyrskie Stavby, April 1965, \*ACSI J-0105  
ID 2204030566

A Lifting of Track and Road Bridges Designed as Frame Systems, by A. Sustacek, CZECH, per, Inzenyrskie Stavby, April 1965, pp 151-156.  
\*ACSI J-0105  
ID 2204030566

Our Oldest Technical Association Celebrates its Jubilee, by V. Lomic, CZECH, per, Inzenyrskie Stavby, April 1965, pp 156-157.  
\*ACSI J-0105  
ID 2204030566

**Eastern Europe  
Economic (Contd)**

Handbook for Packaging Machine made Products,  
CZECH, rpt, Prirucka Baleni Strojirenskych Vyrobu, 1962, pp 35-58; 75-79.  
\*ACSI J-0301  
ID 2218034565

NCO's Handbook.  
CZECH, rpt, Prirucka Poddustojnika, 1964, pp 56-59.  
\*ACSI J-0326  
ID 2213533564

Decree No 8 on Price Determination, Control and Statistics Issued by State Commission for Finance, Prices and Wages on 24 January 1966, 28 pp.  
CZECH, per, Sbirka zakonu Ceskoslovenske socialisticke republiky, Vol 1966, Part 3, 16 Feb 1966, pp. 18-28.  
JPRS 36032

Decree No 9 on Price Control and Price Statistics Issued by the Central Commission of People's Control and Statistics, 4 Feb 1966, 8 pp.  
CZECH, per, Sbirka zakonu Ceskoslovenske socialisticke republiky, Vol 1966, Part 3, 16 Feb 1966, pp. 29-31.  
JPRS 36032

Machines and Devices for the Building Mechanization, by V. Smitka.  
CZECH, per, Technicka Prace, Sept 1963, pp 676-680.  
\*ACSI J-0263  
ID 2204035366

Tasks of Peasant Trade Cooperatives, by G. Sperling, 5 pp.  
GERMAN, per, Agrar Okonomik, No 4, Apr 1966, pp. 184-193  
JPRS 36133

Information on the Construction Materials Industry, by Dr. H. Muller, 6 pp.  
GERMAN, per, Baustoffindustrie, No 4, Apr 1966, pp. 97-100.  
JPRS 36189

Annual Report for 1965 on the Production of Inland Fishing in East Germany, by Herbert Zobel, 21 pp.  
GERMAN, per, Deutsche Fischerei-Zeitung, No 4, Apr 1966, pp. 81-94.  
JPRS 36131

**Eastern Europe  
Economic (Contd)**

Tasks and Problems of Specialized Potato Production, by G. Jannermann and M. Kleditzsch, 8 pp.  
GERMAN, per, Die Deutsche Landwirtschaft, No 4, Apr 1966, pp. 180-183.  
JPRS 36022

Crop and Weather Report, 11 March - 10 April 1966, by W. Krumbiegel, 5 pp.  
GERMAN, per, Die Deutsche Landwirtschaft, Vol 17, No 5, May 1966, pp. 271-272.  
JPRS 36022

A Survey of the Status of the Development of Textile Auxiliaries in the German Democratic Republic, by G. Hornbogen, 19 pp.  
GERMAN, per, Deutsche Textil-Technik, No 3, Mar 1966, pp. 183-185 and No 4, Apr 1966, pp. 258-262.  
JPRS 36005

Under the Leadership of the S.E.P. Our Textile Industry Is on the Right Track, by K. Abendroth, 8 pp.  
GERMAN, per, Deutsche Textil-Technik, No 4, Apr 1966, pp. 209-211.  
JPRS 35005

The Creative Work of the Party in the Shaping of the Socialist Economic System, by Gunter Mittag, 16 pp.  
GERMAN, per, Einheit, No 4, 4 Apr 1966, pp. 466-475.  
JPRS 35910

Basic Problems of Socialist Rationalization by Alfred Neumann, 14 pp.  
GERMAN, per, Einheit, No 4, 4 Apr 1966, pp. 476-487.  
JPRS 35910

Problems of Planning in the Second Stage of the New Economic System of Planning and Management, by Siegfried Bohm, 15 pp.  
GERMAN, per, Einheit, No 4, 4 Apr 1966, pp. 500-509.  
JPRS 35910

Economic Problems of the Shaping of East Germany's Modern Intensive Agriculture, by Gerhard Grunenberg, 14 pp.  
GERMAN, per, Einheit, No 5, May 1966, pp. 632-640.  
JPRS 36072

Eastern Europe  
Economic (Contd)

20-Year Development of the Energy Industry,  
by J. Dattelbaum and H. Kaschade, 10 pp.  
GERMAN, per, Energietechnik, Vol 16, No 4,  
Apr 1966, pp. 145-148.  
JPRS 36083

Status of the Development of Multi-Stage Vertical Condensate Centrifugal Pumps in the GDR and Observations Concerning Self-Regulating of Condensate Centrifugal Pumps, by A. Gradewald, 18 pp.  
GERMAN, per, Energietechnik, Vol XVI, No 4, Apr 1966, pp. 149-154.  
JPRS 36083

New Equipment from VEB Carl Zeiss JENA at the 1966 Leipzig Technical Fair, by R. Jobst.  
GERMAN, per, Feingeratetechnik, No 4, 1966, pp 153-157.  
\*ACSI J-0300  
ID 2204037866

Films for Meat and Meat Products,  
by C. F. Boehme, 5 pp.  
GERMAN, per, Fette, Seifen, Anstrichmittel, Vol LXVII, No 2, 1965, pp 131-132.  
CFSTI TT-66-10755

Long-Range Plan of the Consumer Cooperatives to 1970, by Horst Klingbeil, 8 pp.  
GERMAN, per, Der Handel, Vol 16, No 4, Apr 1966, pp. 155-158.  
JPRS 36005

Information on the Organization of the Consumer Cooperatives, by Kurt Preikschat, 6 pp.  
GERMAN, per, Der Handel, Vol 16, No 4, Apr 1966, pp. 187-189.  
JPRS 36005

Research and Development, by G. Kittel, 14 pp.  
GERMAN, per, Kraftfahrzeugtechnik, No 2, 1966, pp 45-50.  
ACSI J-0122  
ID 2204031336

New Variants of the IFA W 50 Truck,  
by Gerhard Zimmer, 11 pp.  
GERMAN, per, KFZ-Kraftfahrzeug-Technik, No 3, 1966, pp 97-101,  
ACSI J-0180  
ID 2204032766

Eastern Europe  
Economic (Contd)

The W 50 With Universal Installer Crane,  
GERMAN, per, KFZ-Kraftfahrzeug-Technik, No 3, 1966, pp 104.  
ACSI J-1080  
ID 2204032766

East German -- Danish Trade Agreement for 1966, 5 pp.  
GERMAN, per, Markt-Informationen, No 19, 9 May 1966, p. 11.  
JPRS 36072

Turbine Unit Construction Systems for Industrial and Heating Power Stations, by P. Kamps, 17 pp.  
GERMAN, per, Maschinenbautechnik, No 4, Apr 1966, pp. 170-177.  
JPRS 36082

The New 25 Megawatt Industrial Turbine Standard Series, by G. Elschner and W. Groth, 14 pp.  
GERMAN, per, Maschinenbautechnik, No 4, Apr 1966, pp. 179-185.  
JPRS 36082

Physico-Chemical Investigations of Gamma-Ray Modified Cellulose, by H. Sulser, H. Mohler, et al, 9 pp.  
GERMAN, per, Mitteilungen aus dem Gebiete der Lebensmitteluntersuchungen und Hygiene, Vol IV, No 4, 1964, pp 264-273.  
CFSTI TT-66-11081

The New Vacuum Steel Plant in the '8 Mai 1945' Fine Steel Mill, Freital, by Rolf Thieme and Karlheinz Werner, 18 pp.  
GERMAN, per, Neue Huette, Vol 11, No 4, Apr 1966, pp. 200-207.  
JPRS 36083

Transportation Minister Reports on East German Railroad System, by Dr. Erwin Kramer, 13 pp.  
GERMAN, per, Osshd Zeitschrift der Organisation fur die Zusammenarbeit der Eisenbahnen, Vol 9, No 2, Mar-Apr 1966, pp. 1-9.  
JPRS 36073

Reports on OSShd Committee Work, 11 pp.  
GERMAN, per, Osshd Zeitschrift der Organisation fur die Zusammenarbeit der Eisenbahnen, Vol 9, No 2, Mar-Apr 1966, pp. 23-27.  
JPRS 36073

Prices in CEMA Foreign Trade, by Bela Csikos-Nagy, 12 pp.  
GERMAN, per, Osteuropa-Wirtschaft, Mar 1966, pp. 1-10.  
JPRS 36003

**Eastern Europe  
Economic (Contd)**

Plastics Production and Research in East Germany -- Past and Future, by Dr. A. Wende, 9 pp.

GERMAN, per, Plaste und Kautschuk, No 4, Apr 1966, pp. 193-195.  
JPRS 36031

Direction and Achievements of Ocean Fishing of GDR, by H. Weise, 21 pp.

GERMAN, per, Schiffbautechnik, No 4, Apr 1966, pp. 219-229.  
JPRS 36176

Information on East German Seaports, by G. Scheff, 18 pp.

GERMAN, per, Schiffautechnik, No 4, Apr 1966, pp. 230-237.  
JPRS 36180

New Tank Cleaning Vessel Developed by Warnow Ship Yard, by Rostock Hollnagel, 5 pp.

GERMAN, per, Seeverkehr, No 5, May 1966, pp. 197-198.  
JPRS 36073

New Regulations Concerning Management of Cooperative and Private Forests, by S. Ziegler and G. Oelschelegel, 8 pp.

GERMAN, per, Die Sozialistische Forst Wirtschaft, Vol 16, No 5, May 1966, pp. 137-140.  
JPRS 36072

Conference on Questions of International Postal and Telecommunications Law, by Rudolf Lange, 6 pp.

GERMAN, per, Staat und Recht, No 4, Apr 1966, pp. 672-676.  
JPRS 35073

Theses on the Legal Organization of Cooperation Associations in Agriculture, by Hans-Werner Alma and Gerhard Rosenau, 23 pp.

GERMAN, per, Staat und Recht, No 5, May 1966, pp. 782-801.  
JPRS 36072

Legal Questions Concerning the Exchange of Scientific-Technical Results among CEMA Countries in Connection with Foreign Trade Operations, by Dietrich Maskow, 20 pp.

GERMAN, per, Staat und Recht, No 5, May 1966, pp. 801-817.  
JPRS 36088

**Eastern Europe  
Economic (Contd)**

Information on the Veb Elbaue-Ostharz Long-Distance Water Supply Enterprise, 6 pp.

GERMAN, per, Wasserwirtschaft-Wassertechnik, Vol XVI, No 4, Apr 1966, pp. 131-133.  
JPRS 35997

Economic Measures Promote International Socialist Division of Labor, by Dr. Heinz Emmerich, 12 pp.

GERMAN, per, Die Wirtschaft, 7 Apr 1966, pp. 16-17.  
JPRS 35860

Experiences and Problems of Long-Range Planning, by Dr. habil. Johannes Tamm, 8 pp.

GERMAN, per, Die Wirtschaft, No 16, 21 Apr 1966, pp. 16-17.  
JPRS 36247

The National Guiding Organs of Scientific Life in the Socialist Nations of Europe, by Lajos Lorincz, 24 pp.

HUNGARIAN, per, Allam es Jogtudomány, Vol VIII, No 3, 1965, pp. 389-407.  
JPRS 35908

The Congress of Well Thought-Out Constructive Work, by Imre Vertes, 25 pp.

HUNGARIAN, per, Partelet, No 5, May 1966, pp. 6-15.  
JPRS 36057

Development of the Hungarian Chemical Industry, by Mrs. Laszlo Ormai and Dr. Laszlo Orosz, 26 pp.

HUNGARIAN, per, Statistikai Szemle, No 2, Feb 1966, pp. 158-175.  
JPRS 36004

Basic Principles of the Reform of the Cooperatives' Economic Management System, by Janos Keseru, 12 pp.

HUNGARIAN, per, Tarsadalmi Szemle, No 4, Apr 1966, pp. 3-13.  
JPRS 36022

Development of the Railways, 1966-1970.

POLISH, rpt, 1966  
DIA 2878021866

Domestically-Produced Auxiliary Agents for the Textile Industry, by Witold Daweck and Zenon Bochenki, 7 pp.

POLISH, per, Chemik, No 2, Feb 1966, pp. 44-47.  
JPRS 36031

Eastern Europe  
Economic (Contd)

Some Problems of CEMA Specialization in Chemical Industry, by Zdzislaw Nowak, 5 pp.  
POLISH, per, Chemik, No 2, Feb 1966, pp. 61-62.  
JPRS 36088

Technical Progress and Electric Power Raw Materials Consumption by the Chemical Industry, by Czeslaw Malycha, 14 pp.  
POLISH, per, Chemik, No 3, Mar 1966, pp. 81-85.  
JPRS 36031

Domestic Auxiliary Agents for the Leather Industry, by Witold Kawecki and Zenon Bochenski, 7 pp.  
POLISH, per, Chemik, No 3, Mar 1966, pp. 94-95.  
JPRS 36031

Effectiveness of Wheat and Sugar Beet Cultivation, by Stanislaw Rochna, 14 pp.  
POLISH, per, Gospodarka Planowa, No 5, May 1966, pp. 36-41.  
JPRS 36133

1961-1965 Results of Housing Construction Cooperatives, by Henryk Dabkowski, 6 pp.  
POLISH, per, Investycje i Budownictwo, No 4, Apr 1966, pp. 20-22.  
JPRS 36008

The Premium Fund in Certain State Farms, 11 pp.  
POLISH, per, Monitor Polski, No 22, 19 May 1966, pp. 225-228.  
JPRS 36072

Results of the Petroleum Industry's Scientific and Technical Cooperation with Abroad, by F. Mitrega, 5 pp.  
POLISH, per, Nafta, No 4, Apr 1966, pp. 5-6 of the supplement  
JPRS 36089

Achievements and Tasks of the Petroleum Industry, by Antoni Cwierz, 21 pp.  
POLISH, per, Nafta, No 4, Apr 1966, pp. 97-106.  
JPRS 36089

The Workers' Self-Government Conference and the Director of the Agricultural Enterprise, by Tadeusz Rybicki, 11 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 7, 1-15 Apr 1966, pp. 1-3.  
JPRS 36007

Eastern Europe  
Economic (Contd)

A Profitability Analysis of the State Farms, by Dr. Stanislaw Rosowski, 10 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 7, 1-15 Apr 1966, pp. 12-15.  
JPRS 36007

The Development of Agriculture in Western Pomerania, by Dr. Pawel Warchol, 8 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 7, 1-15 Apr 1966, pp. 17-18.  
JPRS 36007

The Profitability of State Farms, by Dr. Stanislaw Rosowski, 9 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 8, 16-30 Apr 1966, pp. 4-7.  
JPRS 36072

The Planning Functions of the Gromada Peoples Councils and the Agricultural Circles, by Dr. Wladyslaw Misina, 10 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 8, 16-30 Apr 1966, pp. 10-12.  
JPRS 36072

Development of Agricultural Construction, by Mgr Dymitr Perun, 6 pp.  
POLISH, per, Nowe Rolnictwo, No 10, 16-31 May 1966, pp. 1-4.  
JPRS 36268

The Role of Agricultural Circles in Coordination of Agricultural Production in Rural Areas, by Marian Kargol, 7 pp.  
POLISH, per, Nowe Rolnictwo, No 10, 16-31 May 1966, pp. 12-14.  
JPRS 36268

Trends for the Intensification of the Productiveness of State Forests, by Mgr Inzynier Grzegorz Fomicz, 15 pp.  
POLISH, per, Las Polski, Vol 40, No 8, 16-30 Apr 1966, pp. 3-10.  
JPRS 36007

Prospects for Expansion of the Cottage Industry in 1966-1970, by Aleksander Pikulski, 9 pp.  
POLISH, per, Przegląd Drobnej Wytwarzosci, No 7, Apr 1966, pp. 2-6.  
JPRS 36008

Small-Scale Food Industry, by Mieczyslaw Hoffmann, 11 pp.  
POLISH, per, Przemysł Spożywczy, No 3, 1966, pp. 8-17.  
JPRS 36008

Eastern Europe  
Economic (Contd)

Long-Range Employment Plan for Engineers and Technicians, 9 pp.

POLISH, per, Szkola Zawodowa, No 4, Apr 1966, pp. 4-6.  
JPRS 35860

1965 Shipping Results of Polish Seaports, by Cz. K., I. K., W. SZ, 10 pp.  
POLISH, per, Technika i Gospodarka Morska, No. 2, Feb 1966, pp. 75-78.  
JPRS 36180

Polish Seaborne Trade Figures for 1965, 18 pp.  
POLISH, per, Technika i Gospodarka Morska, No 4, Apr 1966, pp. 151-154.  
JPRS 36132

Development of West African Line of the Polish Steamship Company, by Aleksandra Wojewska, 5 pp.  
POLISH, per, Technika i Gospodarka Morska, No 4, Apr 1966, pp. 156-157.  
JPRS 36132

Some Problems of the Grain Market, by Henryk Cholaż and Augustyn Wos, 13 pp.  
POLISH, per, Wies Wspolczesna, No 4, Apr 1966, pp. 31-40.  
JPRS 36007

Proposed Changes in Planning and Management in the Mining and Power Industries, by Jan Mitrega, 8 pp.  
POLISH, np, Zycie Gospodarcze, No 16, 17 Apr 1966, pp. 1, 4-5.  
JPRS 36083

Small-Scale Industry in 1966-1970, by Krzysztof Krauss, 8 pp.  
POLISH, np, Zycie Gospodarcze, No 16, 17 Apr 1966, pp. 1-2.  
JPRS 36008

Specialization in Industry and CEMA, by Zygmunt Kah, 6 pp.  
POLISH, per, Zycie Gospodarcze, No 17, 24 Apr 1966, p. 3.  
JPRS 36003

Agriculture in 1966-1970, by Wladyslaw Jagustyn, 7 pp.  
POLISH, np, Zycie Gospodarcze, No 21, 22 May 1966, pp. 1, 8-9.  
JPRS 36022

Eastern Europe  
Economic (Contd)

Shortcomings of the Meat Industry, by Antoni Gutowski, 6 pp.  
POLISH, np, Zycie Gospodarcze, No 21, 22 May 1966, p. 3.  
JPRS 35997

Problems of Animal Husbandry in 1966-1970 - Meat or Milk, by Wacław Tarczynski, 5 pp.  
POLISH, np, Zycie Gospodarcze, No 21, 22 May 1966, p. 9.  
JPRS 35997

Foodstuffs and Consumer Goods Consumption 1966-1970, by Grzegorz Pisarski, 5 pp.  
POLISH, per, Zycie Gospodarcze, No 22, 29 May 1966, pp. 1 & 5.  
JPRS 36132

Achievements and Perspectives of the Electric Power Industry of the Socialist Republic of Rumania, by Emil Draganescu, 7 pp.  
RUMANIAN, per, Energetica, Vol 14, No 1, Jan 1966, pp. 1-3.  
JPRS 36083

Contribution of Bank Credit to Formation of Circulating Resources for Enterprises in Heavy Industry, by A. Petrescu, 10 pp.  
RUMANIAN, per, Finante si Credit, Vol XII, No 2, Feb 1966, pp. 3-11.  
JPRS 36004

Increasing Potential for Use of Credit in Small Mechanization Operations, by Gheorghe Marcu, 13 pp.  
RUMANIAN, per, Finante si credit, Vol XII, No 2, Feb 1966, pp. 12-22.  
JPRS 36032

Increasing Economic Efficiency among Local Construction-Assembly Organizations, by O. D. Kligher and I. Solomoviei, 9 pp.  
RUMANIAN, per, Finante si Credit, Vol XII, No 2, Feb 1966, pp. 23-31.  
JPRS 36008

Reserves for Improvement of Reclamation Activities, by P. Paraschiv, 6 pp.  
RUMANIAN, per, Finante si Credit, Vol XII, No 2, Feb 1966, pp. 40-45.  
JPRS 36007

Eastern Europe  
Economic (Contd)

Future Problems of Extension of Credit to Machine and Tractor Stations, by M. Susuioceanu, and G. Dimitrescu, 5 pp.  
RUMANIAN, per, Finante si Credit, Vol XII, No 2, Feb 1966, pp. 52-56.  
JPRS 36007

Current Problems Raised by the First National Conference of Construction Industry Workers, by T. Horvath, 17 pp.  
RUMANIAN, per, Finante si credit, Vol 12, No 3, Mar 1966, pp. 3-16.  
JPRS 36132

Maximum Efficiency in Utilization of Funds for Machinery and Equipment on State Farms, by P. Grubischi, 12 pp.  
RUMANIAN, per, Finante si credit, Vol 12, No 3, Mar 1966, pp. 17-26.  
JPRS 36268

Possibilities for Improving the Planning and Execution of Local Budgets, by N. Anghel, 11 pp.  
RUMANIAN, per, Finante si credit, Vol 12, No 3, Mar 1966, pp. 27-35.  
JPRS 36247

Trade in Licences, by M. Livescu, 6 pp.  
RUMANIAN, per, Inventii si inovatii, No 2, Feb 1966, pp. 54-56.  
JPRS 36088

Problems Related to the Patent Purity of Equipment Designed by Design Institutes for Chemical Plants, by S. Lupan and M. Rothenberg, 9 pp.  
RUMANIAN, per, Inventii si inovatii, No 2, Feb 1966, pp. 68-72.  
JPRS 36082

Aspects of Resolving Invention Problems in the Chemical Industry, by Elena Bedivan, 5 pp.  
RUMANIAN, per, Inventii si inovatii, No 4, Apr 1966, pp. 132-134.  
JPRS 36189

Training and Education of Cadres, by Dumitru Ivanovici, 11 pp.  
RUMANIAN, per, Lupta de Clasa, Vol 46, No 4, Apr 1966, pp. 35-44.  
JPRS 36097

Eastern Europe  
Economic (Contd)

Scientific Organization of Production in Forestry, by Teodor Tit, 6 pp.  
RUMANIAN, per, Muncitorul forestier, 23 Mar 1966.  
JPRS 36072

Changes in Terrain Utilization, by Ion Velcea, 15 pp.  
RUMANIAN, per, Natura, Mar/Apr 1966, pp. 3-13.  
JPRS 36131

The Industrialization of Rumania, by Dr. Constantin Ionescu, 23 pp.  
RUMANIAN, per, Probleme Economice, No 4, Apr 1966, pp. 101-119.  
JPRS 36209

Evolution of the Energy Base, by Remus Radulet, and Nicolae Gheorghiu, 22 pp.  
RUMANIAN, per, Probleme Economice, No 4, Apr 1966, pp. 120-136.  
JPRS 36189

The Complex Character of the National Economy and the National Income, by Dr. Ion Raver, 22 pp.  
RUMANIAN, per, Probleme Economice, No 4, Apr 1966, pp. 137-152.  
JPRS 36209

Development and Modernization of Socialist Agriculture, by Dr. Nicolae Giosan, 18 pp.  
RUMANIAN, per, Probleme Economice, No 4, Apr 1966, pp. 163-177.  
JPRS 36276

Possibilities for Expanding Exports of Machinery and Equipment, by I. Stoian, 16 pp.  
RUMANIAN, per, Probleme economice, No 5, May 1966, pp. 54-64.  
JPRS 36268

Contributions to Research in the Field of Railroad and Bridge Construction and Maintenance, by R. Manolescu, 12 pp.  
RUMANIAN, per, Revista calilor ferate, Vol 14, No 3, Mar 1966, pp. 125-130.  
JPRS 36073

Eastern Europe  
Economic (Contd)

Classification of Fixed Assets of the Rumanian Railroads and the Need for Improvement in This Field, by N. Ionescu Zane, 7 pp.  
RUMANIAN, per, Revista calilor ferate, Vol 14, No 3, Mar 1966, pp. 150-152 & 162.  
JPRS 36073

Tasks of the State Farms for 1966 in Light of the Directives of the Party, by Angelo Miculescu, 10 pp.  
RUMANIAN, per, Revista Gospodariilor Agricole de Stat, Vol 18, No 1, Jan 1966, pp. 1-4.  
JPRS 36007

Fulfillment of the Six-Year Plan in the Forestry Economy and New Objectives for the Forestry Sector, by M. Sudar, 7 pp.  
RUMANIAN, per, Revista Padurilor, Vol 81, No 1, Jan 1966, pp. 1-3.  
JPRS 36022

Economic Aspects of the Introduction of Mechanization in Silviculture and Forest Exploitation Work in 1959-1965, by Eng. A. Sava and Ed. Turcu, 7 pp.  
RUMANIAN, per, Revista Padurilor, Vol 81, No 1, Jan 1966, pp. 3-8.  
JPRS 36022

The New Phase of Afforestation, by I. Cazacu and V. Bakos, 9 pp.  
RUMANIAN, per, Revista Padurilor, No 3, Mar 1966, pp. 117-119.  
JPRS 36131

Development and Consolidation of Rumanian State Farms, by Dr. M. Bulgariu and M. Rozen, 15 pp.  
RUMANIAN, per, Revista de statistica, Vol XV, No 3, Mar 1966, pp. 3-15.  
JPRS 36131

Utilization of Licenses in the Machine Building Industry, by A. Prodan, 5 pp.  
RUMANIAN, per, Scinteia, 11 May 1966, pp. 1, 3.  
JPRS 36082

Increased Efficiency in the Expenditure of Investment Funds, by M. Diamandopol, 5 pp.  
RUMANIAN, per, Scinteia, 12 May 1966, pp. 1, 3.  
JPRS 36094

Eastern Europe  
Economic (Contd)

Rebirth of the Rumanian Aviation Industry, by Radu Manicatide, 5 pp.  
RUMANIAN, per, Sport si Tehnica, Vol 12, No 4, Apr 1966, pp. 16-17.  
JPRS 36246

Development of the Regimes in the Years of Construction of Socialism, by V. Trebici, 5 pp.  
RUMANIAN, per, Viata Economica, Vol 4, No 18, 6 May 1966, p. 8.  
JPRS 35860

Utilization Rate of Machinery and Equipment in Enterprises of the "23 August" Raion-Bucharest, by Gheorghe Serban, 7 pp.  
RUMANIAN, per, Viata economica, No 19, 13 May 1966, pp. 1, 4.  
JPRS 36031

Development of Automation, by Gh. Tunsiciu, 7 pp.  
RUMANIAN, per, Viata Economica, Vol IV, No 20, 20 May 1966, pp. 1 & 4.  
JPRS 36031

The Electrotechnical Industry in Step with the Requirements of the Economy, by R. Vladoi-anu, 7 pp.  
RUMANIAN, per, Viata Economica, Vol IV, No 20, 20 May 1966, pp. 8-9.  
JPRS 36031

The Electrification of Bulgaria, by Prof. K. Dmitrov, 7 pp.  
RUSSIAN, per, Elektrichestvo, No 3, Mar 1966, pp. 85-86.  
JPRS 36094

The "ATM" Enterprise for Automation and Measuring Devices in Industry, 8 pp.  
SERBO-CROATIAN, per, Automatika, No 6, Nov-Dec 1965, pp. 396-398.  
JPRS 36004

The "Prva Iskra" Factory, Baric-Belgrade, 10 pp.  
SERBO-CROATIAN, per, Automatika, No 6, Nov-Dec 1965, pp. 399-402.  
JPRS 36004

Eastern Europe  
Economic (Contd)

The "Prva Petoletka" Hydraulic Equipment  
Factory, Trstenik, 10 pp.  
SERBO-CROATIAN, per, Automatika, No 6, Nov-Dec  
1965, pp. 403-406.  
JPRS 36004

The "Teleoptik" Factory, Zemun, 6 pp.  
SERBO-CROATIAN, per, Automatika, No 6, Nov-Dec  
1965, pp. 407-409.  
JPRS 36004

The Economic Interest in Results of Enter-  
prises Will Become An Important Moving  
Force in the Economy, by Frantisek Krajcir,  
6 pp.  
SERBO-CROATIAN, np, Borba, 4 Apr 1966.  
JPRS 35860

Twenty Years of Agrarian Reform in Yugoslavia,  
by Petar Grahovac, 20 pp.  
SERBIAN, per, Ekonomika Poljoprivrede, No 3,  
Mar 1966, pp. 186-202.  
JPRS 36133

The Hidroelektra Construction Enterprise  
in Zagreb, 1946-1966, 20 pp.  
CROATIAN, per, Gradevinar, No 2, Feb 1966,  
pp. 45-53.  
JPRS 36189

Development of the Construction Institute of  
Croatia, 1950-1965, by Milan Jancikovic,  
8 pp.  
SERBO-CROATIAN, per, Gradjevinar, No 3, Mar  
1966, pp. 127-131.  
JPRS 35997

The Production and Processing of Nonmetals, by  
Dragic Stokrupa, 15 pp.  
SERBO-CROATIAN, per, Jugoslovenski, No 11,  
Nov 1965, pp. 419-424.  
JPRS 36083

Status of Agricultural Machinery and Equip-  
ment on Yugoslavia's Farms, by Borislav  
Siradovic, 12 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled,  
No 11, Nov 1965, pp. 425-428.  
JPRS 36072

Eastern Europe  
Economic (Contd)

The Production and Consumption of Coal, by  
Miroslav Kolenc, 17 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled,  
No 12, Dec 1965, pp. 465-470.  
JPRS 36083

The Fluctuation of Prices, 1962-1965, 14 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled,  
No 1, Jan 1966, pp. 5-9.  
JPRS 36032

Consumer Credits, 8 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled,  
No 1, Jan 1966, pp. 10-12.  
JPRS 36032

Development and Problems of Petroleum and Gas  
Exploration and Production in Yugoslavia, by  
Ljubisa Paradjanin, 19 pp.  
CROATIAN, per, Nafta, No 1-2, Jan-Feb 1966,  
pp. 3-12.  
JPRS 36083

Development of the Chemical Industry in  
Yugoslavia, by Slava Delfin, 8 pp.  
CROATIAN, per, Nafta, No 1-2, Jan-Feb 1966,  
pp. 31-35.  
JPRS 36083

Petroleum and Gas in the Fuel and Power System  
of Yugoslavia, by Ivo Jamnicki, 32 pp.  
CROATIAN, per, Nafta, No 1-2, Jan-Feb 1966,  
pp. 35-50.  
JPRS 36083

The New System of Forming Prices and Social  
Control of Prices, 12 pp.  
SERBIAN, per, Nova Trgovina, No 4, Apr 1966,  
pp. 167-171.  
JPRS 36094

Role and Tasks of the Service for Transmission  
and Application of Science in Agriculture,  
by Ivan Novak, 16 pp.  
SERBIAN, per, Poljoprivreda, No 3, Mar 1966,  
pp. 1-12.  
JPRS 36022

Information on the Law on Statistics,  
by Slobodan Maksimovic, 5 pp.  
SERBO-CROATIAN, per, Privredni pregled,  
Vol XV, 4 Jun 1966, p. 2.  
JPRS 36209

**Eastern Europe  
Economic (Contd)**

Employment during the Implementation of the Economic Reform, by Djuro Vekic, 17 pp.  
SERBIAN, per, Produktivnost, No 4, Apr 1966, pp. 243-249.  
JPRS 36134

Metallogenetic Eras and Tungsten Deposits in Yugoslavia, by Dr. Engr Slobodan Jankovic, 6 pp.  
SERBO-CROATIAN, per, Rudarski glasnik, No 1, Jan 1966, pp. 47-50.  
JPRS 36238

Types of Nickel Deposits in Yugoslavia, by Dr. Engr Slobodan Jankovic, 6 pp.  
SERBO-CROATIAN, per, Rudarski glasnik, No 1, Jan 1966, pp. 51-54.  
JPRS 36238

Contributions and Taxes Paid by Private Agricultural Producers in Yugoslavia, by M. D., 10 pp.  
SERBIAN, np, Savremena Praksa, 31 Jan 1966, pp. 1 & 7.  
JPRS 36072

Business of Economic Organizations in 1965, 10 pp.  
SERBIAN, np, Savremena Praksa, 16 May 1966, pp. 1 & 12.  
JPRS 35860

The Revised Text of the Law on the Organization of Yugoslav Railroads, 17 pp.  
CROATIAN, per, Sluzbeni list SFRJ, Vol XXII, No 5, 2 Feb 1966, pp. 89-95.  
JPRS 35997

The Law on Housing Relations, 39 pp.  
SERBO-CROATIAN, per, Sluzbeni list SFRJ, Vol XXII, No 11, 16 Mar 1966, pp. 227-238.  
JPRS 35997

**Eastern Europe  
Political**

Duties of the Schools in Strengthening Ideological and Political Education, by Hamit Beqja, 26 pp.  
ALBANIAN, per, Aresimi Popullor, No 2, Mar-Apr 1966, pp. 3-35.  
JPRS 36235

Formalism and Redtape in Political Work with the Masses Should Be Combated, by Xhorzhi Robo, 13 pp.  
ALBANIAN, per, Rruga e Partise, No 2, Feb 1966, pp. 3-15.  
JPRS 35905

Self-Satisfaction and Indifference Hinder the Implementation of the Party Program, by Tefik Cumani, 11 pp.  
ALBANIAN, per, Rruga e Partise, No 2, Feb 1966, pp. 14-22.  
JPRS 35905

Necessary Generalizations (Regarding the Dangers of Contemporary Bourgeois Ideology and Culture), 6 pp.  
BULGARIAN, np, Narodna kultura, No 13, Mar 1966, pp. 1, 4.  
JPRS 35815

Duties of the Bureau in the Primary Party Organization, by Milka Velichkova, 12 pp.  
BULGARIAN, per, Partien Zhivot, No 3, Feb 1966, pp. 17-24.  
JPRS 35815

The Primary Party Organization--A Political Leader, by Stoil Khristov, 8 pp.  
BULGARIAN, per, Partien zhivot, No 6, May 1966, pp. 36-42.  
JPRS 36129

The Dialectics of the Withering Away of the Socialist State and the Formula for Its Strengthening, by Peyko Slavov, 19 pp.  
BULGARIAN, per, Pravna misul, No 6, Nov/Dec 1965, pp. 86-99.  
JPRS 35815

Interview with the Czech Writer Ivan Klimah, by Yehudah Lahav, 5 pp.  
HEBREW, np, Kol Haan, 6 May 1966, page not given.  
JPRS 36119

Eastern Europe  
Political (Contd)

Is the Importance of Ideology Declining?, by Stanislaw Rainko, 7 pp.  
POLISH, per, Argumenty, No 17, 24 Apr 1966, p. 8; and No 20, 15 May 1966, pp. 3 & 6.  
JPRS 36129

The Essence and Internal Functions of the Rumanian Socialist State during the Completion Period of the Socialist Construction, by Dr. Ioan Ceterchi, 20 pp.  
RUMANIAN, per, Justitia Noua, Vol XXII, No 1, Jan 1966, pp. 3-16.  
JPRS 36129

The Immortal Son of Germany, by Ya. Dvoretzkiy, 5 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 122-124.  
JPRS 36051

45th Anniversary of the Rumanian Communist Party, by Alexandru Draghici, 14 pp.  
RUSSIAN, per, Kommunist, No 7, 10 May 1966, pp. 73-84.  
JPRS 36051

Polish Account of 23rd CPSU Congress, by Edward Gerek, 5 pp.  
RUSSIAN, np, Pravda, 31 May 1966, p. 5.  
JPRS 36119

Relations between Yugoslavia and Italy, 16 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled, No 12, Dec 1965, pp. 477-482.  
JPRS 36003

Eastern Europe  
Military

The Role of Commanders and Staffs as Regards the Training of Rear Service Units, by G. Germanov, 8 pp.  
BULGARIAN, per, Armeyski pregled, No 5, May 1966, pp. 10-16.  
JPRS 36246

The Defense of a Tank Battalion in the Course of an Attack, by Col P. Markov and Lt. Col G. Kolev, 7 pp.  
BULGARIAN, per, Armeyski pregled, No 5, May 1966, pp. 29-34.  
JPRS 36246

The Use of Helicopters in Combat, by Lt. Col Sp. Spasov, 6 pp.  
BULGARIAN, per, Armeyski pregled, No 5, May 1966, pp. 97-99.  
JPRS 36246

Bulgarian Armed Forces One-Man Command, by Dobri Dzhurov, 8 pp.  
BULGARIAN, np, Narodna Armiya, 27 May 1966, pp. 1 & 2.  
JPRS 36156

The Amphibian Armored Car OT-65 by S. Biskup et al.  
CZECH, per, Vojenska Technika, No 1, January 1966, pp 12-13.  
\*ACSI J-0260  
ID 2204035166

General Description, 30-mm Quadruple-Gun AA Battery, Hispano Suiza/Contraves, 82 pp.  
GERMAN, rpt, Allgemeine Beschreibung-30mm Vierlings-Geschutz Flab.-Btt Hispano Suiza/Contraves, pp 1-46.  
ACSI T-9362  
ID 2204015566

Accessory Equipment for Pillow Tank.  
GERMAN, rpt, Armaturen-Austattung fur Faltbehälter.  
\*ACSI J-0259  
ID 2834009066

Computation of Prospective Favorable Firing Results, Hispano Suiza 30-mm Quad. Btry.  
GERMAN, rpt, Berechnung der Erfolgsaussichten für die 30 mm Vierlingsbatterie Hispano Suiza, pp 1-11.  
ACSI T-9362  
ID 2204015566

Eastern Europe  
Military (Contd)

The Hispano Suiza 30-mm AA Btry-a New  
Conception of Medium-Caliber AA.  
GERMAN, rpt, Die 30 mm Flakbatterie Hispano  
Suiza - Eine Neue Konzeption der  
Mittelkaliber-Flak pp 1-28.  
ACSI 1-9362  
ID 2204015566

Goodyear Pillow Tank  
GERMAN, rpt, Faltbehälter Bauart Goodyear.  
\*ACSI J-0259  
ID 2834009066

Tank Fire Tests in the Pluto Mine in  
Wanne-Bickel, by Spohn, 14 pp.  
GERMAN, per, VFDS Zeit Forschung und Technik  
im Brandschutz, Vol XIV, No 4, 1965,  
pp 107-113.  
Dept of Navy Tr 4739/NRL Tr 1056

Fire Fighting Engines Equipped With  
Powder Throwers, by Friedrich Emrich.  
7pp.  
GERMAN, per, VFDS Zeit Forschung und  
Technik im Brandschutz, Vol XIV, No 4,  
1965, pp 113-116.  
Dept of Navy Tr 4740/NRL Tr 1057

Establishing the Energy Value of Some Food  
Concentrates Used in Feeding the Military  
by W. Marcom, L. Nicolescu, et al.  
RUMANIAN, per, Revista Sanitara Militara,  
No 6, 1964, pp 1041-1048.  
ACSI J-0170  
ID 2204032466

Military Officers Recall Experiences Prior  
to Liberation on 23 August 1944, 14 pp.  
RUMANIAN, per, Viata militara, Apr 1966,  
pp. 9-11.  
JPRS 36246

Combat Characteristics and Design of Yugoslav  
Machine Gun, by Gvozden Vickovic, 8 pp.  
SERBOCROATIAN, per, Front, Vol XXI, No 5,  
28 Feb 1965, pp 22, 23.  
FSTC 381-765-344

Eastern Europe  
Sociological

Comments of Plenum of Writers and Artists  
Union -- the Development of Prose and Literary  
Criticism, by Dalan Shapilo, 6 pp.  
ALBANIAN, up, Drita, 1 May 1966, pp. 2,4.  
JPRS 36235

Decree No 4112 on Changes in Various Laws and  
Decrees, 6 pp.  
ALBANIAN, up, Gazeta Zyrtare, 10 Mar 1966,  
pp. 3-7.  
JPRS 35905

Decision No 14 Approving the Regulation on  
Basic Conditions for Supplying Goods, 6 pp.  
ALBANIAN, up, Gazeta Zyrtare, 10 Mar 1966,  
pp. 12-16.  
JPRS 35905

Literature Should Probe More Deeply into  
the Processes of Actual Life, by Koco Bihiku,  
10 pp.  
ALBANIAN, per, Rruga e Partise, No 2, Feb 1966,  
pp. 23-31.  
JPRS 35905

Ideological and Political Work in the Schools  
Should Be Strengthened, 9 pp.  
ALBANIAN, per, Rruga e Partise, No 2, Feb  
1966, pp. 39-46.  
JPRS 35905

Sanatorium and Resort Administration Tasks,  
5 pp.  
BULGARIAN, per, Durzhaven vestnik, No 44,  
7 June 1966, pp. 1-2.  
JPRS 36261

Incomes and Expenditures of Workers, by  
Atanas Dimitrov, 8 pp.  
BULGARIAN, per, Ekspresna informatsiya-  
khranitelna promishlenost, No 2, Feb 1966,  
pp. 1-3.  
JPRS 36208

Collective Labor Agreements, by Zora Vurbanova,  
9 pp.  
BULGARIAN, per, Partien zhivot, No 5, Apr 1966,  
pp. 17-23.  
JPRS 36032

Eastern Europe  
Sociological (Contd)

New Regulations on Taxation of Self-Employed Artisans, by Walter Filz, 7 pp.  
GERMAN, per, Deutsche Finanzwirtschaft, No 7, Apr 1966, pp. 8 1-8 3.  
JPRS 35860

Religious Practices and Philosophical Attitudes in Light of Sociological Research, by Tadeusz M. Jaroszewski, 23 pp.  
POLISH, per, Kultura i Spoleczenstwo, No 1, Jan-Mar 1966, pp. 133-149.  
JPRS 36097

Resolution No 55 of the Council of Ministers Concerning the Development and Activities of Volunteer Youth Labor Divisions of the Socialist Youth Union and the Rural Youth Union, 6 pp.  
POLISH, np, Monitor Polski, No 11, 25 Mar 1966, pp. 117-119.  
JPRS 36097

Long Range Urban Population Forecast, by Stanislaw Berezowski, 5 pp.  
POLISH, np, Polityka, No 22, 28 May 1966, p. 5.  
JPRS 36097

Shortages in the Medical Field, by Mirosław Chrzanowski, 8 pp.  
POLISH, np, Polityka, No 23, 4 June 1966, p. 4.  
JPRS 36261

Trial Application of the Pert Method in Planning Work on a Farm, by Wojciech Jozwiak, 11 pp.  
POLISH, per, Zagadnienia Ekonomiki Rolnej, No 1(73) Jan-Feb 1966, pp. 99-109.  
JPRS 35860

Morbidity and Sickness Rate of Polish People during 1960-1964, by Z. Branovitzer, J. Chojnowska and O. Fraczek, 14 pp.  
POLISH, per, Zdrowie Publiczne, No 5, May 1966, pp. 305-314.  
JPRS 36208

Current Problems in the Development of Hospitals in Poland, by Ryszard Jachowicz, 7 pp.  
POLISH, per, Zdrowie Publiczne, No 5, May 1966, pp. 317-322.  
JPRS 36208

Eastern Europe  
Sociological (Contd)

Evolution and Present Problems of Hygiene in Rumania, by Gh. Cadariu, 12 pp.  
RUMANIAN, per, Igiens, No 4, Apr 1966, pp. 193-201.  
JPRS 36177

Aspects of the Expansion of the Labor Force, by Adrian Mirza, 14 pp.  
RUMANIAN, per, Lupta de Clasa, Vol 46, No 4, Apr 1966, pp. 10-22.  
JPRS 36097

Measures for Improving Labor Safety and Hygienic Conditions in General, by Ioan Spinu, 5 pp.  
RUMANIAN, per, Muncitorul Sanitar, 5 May 1966, pp. 1, 3.  
JPRS 36140

Achievements in Public Health, 5 pp.  
RUMANIAN, per, Muncitorul Sanitar, 5 May 1966, p. 4.  
JPRS 36140

Changes in the Social Structure of the Population, by Mircea Biji, 13 pp.  
RUMANIAN, per, Probleme Economice, No 4, Apr 1966, pp. 153-162.  
JPRS 36208

Statute of the Union of Communist Youth of the Socialist Republic of Rumania, 15 pp.  
RUMANIAN, per, Tinarul Leninist, Apr 1966, pp. 68-81.  
JPRS 36208

Mass Chronic Diseases, 10 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled, No 1, Jan 1966, pp. 19-22.  
JPRS 36097

Implementation of the Basic Law on Pension Insurance, 9 pp.  
SERBO-CROATIAN, per, Jugoslovenski pregled, No 1, Jan 1966, pp. 23-26.  
JPRS 36097

Customs Rates, by Ante Domandzic, 5 pp.  
SERBIAN, per, Jugoslovenski pregled, No 2, Feb 1966, pp. 58-59.  
JPRS 36209

Eastern Europe  
Sociological (Contd)

Savings Deposits, by Radoslav Vuksanovic,  
8 pp.  
SERBIAN, per, Jugoslovenski pregled, No 2,  
Feb 1966, pp. 60-62.  
JPRS 36209

Changes in the Yugoslav Insurance System, by  
Milan Bajic, 8 pp.  
SERBIAN, per, Opstina, No 4, Apr 1966, pp. 23-  
31.  
JPRS 36140

Bringing Practice in Conducting Administrative  
Proceedings into Conformity with Statutory Reg-  
ulations Concerning Procedure, by Ljubomir Jevtic,  
7 pp.  
SERBIAN, per, Opstina, No 4, Apr 1966, pp. 39-  
47.  
JPRS 36140

WESTERN EUROPE

Economic

Packaging Milk all over the World-Development  
Trends, 18 pp.  
FRENCH, per, Emballages, Vol XXXIV, No 216,  
1964, pp 94-99.  
CFSTI TT-66-10746

The Parma Experimental Laboratory, by  
R. Cultrera, 6 pp.  
FRENCH, per, Revue de la Conserve,  
Vol XX, No 9, Dec 1965, pp 291-294.  
ACSI J-0120

Developments in the Transatlantic Liner Trade.  
Containerships or Pallet Ships, by Tore Wins-  
vold, 12 p.  
NORWEGIAN, per, Tekn. Ukeblad, Vol CXIII, Nr  
24, 16 June 1966.  
Dept of Comm  
Maritime Admin

Western Europe  
Political

French Pro-Chicom Organ Explains "Marxist-  
Leninist" Line on USSR-China Controversy, by  
F. Malot, 8 pp.  
CHINESE, per, L'Humanite Nouvelle, Vol 2,  
No 19, Jun 1966, pp. 12 & 13.  
JPRS 36230

Finnish Representative Discusses Multi-Party  
System in Building of Socialism at German  
Socialist Unity Party Conference, by Elsa  
Aaltonen, 5 pp.  
FINNISH, np, Kansan Uutiset, 14 May 1966, p. 4.  
JPRS 36057

Finnish Communist Party Chief Discusses  
Cooperation within the People's Democratic  
Movement, by Ville Fessi, 6 pp.  
FINNISH, np, Kansan Uutiset, 21 May 1966,  
p. 4.  
JPRS 36119

Roger Garaudy and the Return to Marx, by  
Margaretha Romberg, 6 pp.  
FINNISH, np, Kansan Uutiset, 5 Jun 1966, p. 8.  
JPRS 36230

Finnish Communist's Observations on XXIII  
CPSU Congress, by Aarne Saarinen, 7 pp.  
FINNISH, per, Kommunisti, No 4, Apr 1966,  
pp. 142-145.  
JPRS 35982

The Role of Subjectivism in the Building of  
Communism, by A. Sorokin, 6 pp.  
FINNISH, per, Kommunisti, No 4, Apr 1966,  
pp. 148-151.  
JPRS 35982

Swiss Communist Party View of Self-Management,  
5 pp.  
FRENCH, per, L'Etincelle, Vol 3, No 18, Mar-  
Apr 1966, pp. 7-9.  
JPRS 36119

Is There Still a Communist Party in France?  
by Jacques Jurquet, 5 pp.  
FRENCH, np, L'Humanite Nouvelle, Vol 2,  
No 18, May 1966, p. 1, 2.  
JPRS 35982

Western Europe  
Political (Contd)

Concerning the Eleventh Congress of the Italian Communist Party, 6 pp.  
FRENCH, per, L'Humanite Nouvelle, Vol 2, No 18, May 1966, p. 13.  
JPRS 35982

Critical Review of the 23rd Congress of the Communist Party of the USSR, 7 pp.  
FRENCH, per, Unir pour le Socialisme, No 162, May 1966, pp. 6-7.  
JPRS 35982

Can the French Communist Party Be Reformed?  
6 pp.  
FRENCH, per, Unir pour le Socialisme, No 162, May 1966, pp. 8-9.  
JPRS 35982

Commentaries on the Four Recent Communist Youth Congresses Sponsored by the French Communist Party, 14 pp.  
FRENCH, per, Unir pour le Socialisme, No 162, May 1966, pp. 10-13.  
JPRS 35982

Haitian Marxists-Leninists and the 23rd Congress, 7 pp.  
FRENCH, np, La Voix du Peuple, 8 Apr 1966, pp. 19-20.  
JPRS 36119

La Voix du Peuple Criticizes Recent "Khrushchevist" Congresses, by F. L., 6 pp.  
FRENCH, per, La Voix du Peuple, No 20, 20 May 1966, p. 20.  
JPRS 35889

Congress of West European Communist Parties Held in Vienna, 9-11 May, 8 pp.  
GERMAN, np, Volksstimme, 13 May 1966, pp. 1, 3.  
JPRS 35982

Interview with M. Stoh in the Organ of the Norwegian Communist Party, by M. Kaspi, 5 pp.  
HEBREW, np, Kol Haam, 10 May 1966, p. 2.  
JPRS 36230

Western Europe  
Political (Contd)

Italian Anticomunist Socialist Discussion of Marxist or Liberal Humanism, by Ruggiero Guarini, 14 pp.  
ITALIAN, per, Corrispondenza Socialista, No 4, Apr 1966, pp. 178-185.  
JPRS 35982

Italian Anticomunist Socialist Commentator Thinks CPSU Congress Was Academic-Type Congress, by Giorgio Gironi, 7 pp.  
ITALIAN, per, Corrispondenza Socialista, No 4, Apr 1966, pp. 203-206.  
JPRS 35982

Military

French Navy Personnel Strengths; General Recapitulation of French Naval Manpower as of 31 Jan 1966.  
FRENCH, rpt, 1 January 1966.  
DIA 5832010466

From Military Kites to Guided Reconnaissance Drones, by Maurice Baudouin, 33 pp.  
FRENCH, per, L'Air et L'Espace, No 790, December 1962, pp 19-28. 9700735  
Dept of Navy/ONI Tr No 976

The Braking of Large Vessels, by H. E. Jaeger, M. Jourdain.  
FRENCH, per, Association Tech Maritime et Aeron  
\*Dept of Navy/DTMS

Atomic Risks and Marine Insurance, by P. Gaston-Breton, 5 p.  
FRENCH, per, Journal de la Marine Marchande, 28 April 1966.  
Dept of Comm  
Maritime Admin

Summary Description of the Model 1963, Carrying Bag for Individual Protective Equipment,  
FRENCH, rpt, Notice Descriptive Sommaire du Sac de Transport de l'Equipeent Individuel de Protection, Modele 1963, Koblenz, April 1964.  
\*ALSI J-0014  
ID 2204029266

Western Europe  
Military (Contd)

Instruction for the Use of the Model 1963,  
collection of Protective Items of Equipment.  
FRENCH, rpt, Notice d'Emploi de la Collection  
d'Effets de Protection, Modele 1963,  
C.M.R.

\*ACSI J-0014  
ID 2204029266

Temporary Note: Cloth Cap.  
FRENCH, rpt, Notice Provisoire:  
Casquette en Toile, Jun 1963.

\*ACSI J-0014  
ID 2204029266

Technical Note: Dust Overalls  
FRENCH, rpt, Notice Technique: Combinaison  
Anti-Poussieres, September 1963.

\*ACSI J-0014  
ID 2204029266

Technical Note: Fur-Lined Muffles (Fingerless  
Gloves),  
FRENCH, rpt, Notice Technique: Moufles  
Fourrees, October 1963.

\*ACSI J-0014  
ID 2204029266

Technical Note: Cloth Combat Trousers,  
Model 1963.  
FRENCH, rpt, Notice Technique: Pantalon  
de Combat en Toile, Modele 1963, June 1963.

\*ACSI J-0014  
ID 2204029266

Technical Note: Parka With Removable Liner.  
FRENCH, rpt, Notice Technique: Parka Avec  
Doublure Amovible, June 1963.

\*ACSI J-0014  
ID 2204029266

Technical Note: Assault Pack (Model With Fixed  
Shoulder Straps and Ammunition Pouches).  
FRENCH, rpt, Notice Technique: Sac d'Assault/  
Modele Avec Bretelles Fixes et Poche a  
Munitions, November 1963.

\*ACSI J-0014  
ID 2204029266

Western Europe  
Military (Contd)

Technical Note: Sleeping-Bag Carrier;  
Annex: Description and General Characteristics  
of the Sleeping Bag.

FRENCH, rpt, Notice Technique: Systeme  
de Transport du Sac de Couchage; Annexe:  
Description et Caracteristiques Generales  
du Sac de Couchage, December 1963.

\*ACSI J-0014  
ID 2204029266

Technical Note: Cloth Combat Jacket, Model 1963.  
FRENCH, rpt, Notice Technique Veste de  
Dombat en Toile, Modele 1963, Jun 1963.

\*ACSI J-0014  
ID 2204029266

Vaccinations in Foreign Armies, by R. Buriez,  
P. Many, et al, 10 pp.

FRENCH, per, Revue des Corps de Sante des  
Armees, Vol VII, No 1, Feb 1966.

ACSI J-0058  
ID 2204029266

Long Underwear.

FRENCH, rpt, Sous-Vetement a Jambes Longues et  
Sous-Vetement a Manches Longues. GY.

\*ACSI J-0014  
ID 2204029266

Sociological

Religion or Party? Commentary on a Discourse  
by Paul VI, by Gilbert Mury, 5 pp.

FRENCH, per, France Nouvelle, No 1076, 1 June  
1966, pp. 15, 16.

JPRS 36119

A Contribution to the Analysis of Classes in  
France, 8 pp.

FRENCH, per, L'Humanite Nouvelle, Vol 2, No  
18, May 1966, pp. 12, 13.

JPRS 35982

Western Europe  
Sociological (Contd)

Colloquy of Christians and Marxists Sponsored by Paulus Society of Munich, by Henri Fesquet, 5 pp.  
FRENCH, np, Le Monde, 6 May 1966, p. 8.  
JPRS 35980

Italian Anticommunist Socialist View of Padua, Capital of Dissidence, by Guelfo Zacaria, 9 pp.  
ITALIAN, per, Corrispondenza Socialista, No 4, Apr 1966, pp. 198-202.  
JPRS 35982

AFRICA

Economic

Economic Survey of Mauritania, 23 pp.  
FRENCH, per, Bulletin de l'Afrique Noire, No 416, 4 May 1966, pp. 8393-8409.  
JPRS 35886

The Financial Situation in Upper Volta, by Marc Tiemoko Garango, 5 pp.  
FRENCH, np, Carrefour Africain, Vol 7, No 207, 9 Apr 1966, pp. 3 & 5.  
JPRS 36300

New Prospects in Agriculture, by Firmin Abalo, 6 pp.  
FRENCH, per, Europe-France-Outremer, Vol 42, No 432, Jan 1966, pp. 27, 28, 29, 30, 31.  
JPRS 35882

Decrees Instituting Committees for Central African Planning Organization and Appointing Their Personnel, 8 pp.  
FRENCH, per, Journal Officiel de la Republique Centrafricaine, Vol 8, No 10, 15 May 1966, pp. 259-61, 261-62, 262-63.  
JPRS 36049

Study on the Establishment of Basic Industries in the Congo (Leopoldville), 14 pp.  
FRENCH, per, Lettre Mensuelle de l'INRS, Vol 3, No 3, 20 Mar 1966, pp. 1-14.  
JPRS 36300

Africa  
Economic (Contd)

French Foreign Affairs Secretary Stresses Urgency of African Economic Reorganization, by Jean De Broglie, 5 pp.  
FRENCH, per, L'Observateur du Moyen-Orient et de l'Afrique, Vol X, No 21, 27 May 1966, pp. 16-18.  
JPRS 36214

Mali in 1966 -- A General Survey, 8 pp.  
FRENCH, per, Perspective Africaine -- Syntheses Politiques et Economiques, Vol 10, No 191, 27 Apr 1966, pp. 1-8.  
JPRS 36214

The New African Port of Cotonou, by Th. J. Delaye, 12 pp.  
FRENCH, per, La Revue Maritime, No 229, Feb 1966, pp. 229-241.  
JPRS 36049

Political

Activities of the Ministries of Katanga Oriental Province, by Governor Munongo Godefroid, 9 pp.  
FRENCH, per, Sud-Katanga, Vol 7, No 160, 30 Apr 1966, pp. 3-8.  
JPRS 35882

Madagascar's Position in Present International Politics, by Raymond William Rabemananjara, 7 pp.  
FRENCH, per, L'Afrique Actuelle, No 8, May 1966, pp. 63-64.  
JPRS 36214

Speeches by Barthoud and Massamba-Debat on May Day, 25 pp.  
FRENCH, per, Bulletin Quotidien de l'AGI, 3 May 1966, pp. 2-21 and 5 May 1966, pp. 2-7.  
JPRS 36049

Report on Afro-Asian Journalists Association Conference at Peking, 20-24 April, and Text of Speeches by Malian Delegates, by Modibo Babu Keita, 8 pp.  
FRENCH, np, L'Essor Hebdomadaire, No 356, 23 May 1966, pp. 3, 6.  
JPRS 36191

Africa  
Political (Contd)

Congolese Partisans Seek a Strategy, by A.L. 6 pp.

FRENCH, per, La Gauche, Vol 10, No 18, 7 May 1966, pp. 6-7.  
JPRS 36049

Ghana Takes Steps to Overcome Nkrumah's Legacy, by Gertrud Mander, 6 pp.

GERMAN, np, Die Zeit, Vol 21, No 18, 29 Apr 1966, pp. 6-7.  
JPRS 35882

Soviet View of Problems Confronting the Organization of African Unity, by V. Kudryavtsev, 5 pp.

RUSSIAN, np, Izvestiya, 20 Apr 1966, p. 2.  
JPRS 36300

Strife in Burundi Attributed to Outside Interference, by D. Lozinov, 5 pp.

RUSSIAN, np, Izvestiya, 15 May 1966, p. 5.  
JPRS 36300

Mali Political Leader Stresses the Importance of African Unity, by Madeira Keita, 5 pp.  
RUSSIAN, np, Pravda, 25 May 1966, p. 5.  
JPRS 36300

Soviet Journalist Predicts Emergence of a Free Africa in Spite of Imperialist Subversive Actions, by V. Kudryavtsev, 5 pp.

RUSSIAN, per, La Rubeshom, No 22, 27 May/2 Jun 1966, p. 9.  
JPRS 36300

Madrid Journal Assesses President Luebke's Trip to Africa, by Bernabe Rato, 5 pp.

SPANISH, per, Africa, Vol 23, No 292, Apr 1966, pp. 30-32.  
JPRS 35988

Africa  
Military

Reorganization of Administrative Services of the Central African Republics Armed Forces and Duties of Ministry of National Defense Described, 7 pp.

FRENCH, per, Journal Officiel de la Republique Centrafricaine, Vol 8, No 7, 1 Apr 1966, pp. 195-196.  
JPRS 35882

Sociological

Social Changes among the Baka Pygmies of East Cameroon, by Gerard Althabe, 26 pp.

FRENCH, per, Cahiers d'Etudes Africaines, Vol 5, No 4, 1965, pp. 561-592.  
JPRS 35882

Three Congo (Leopoldville) Labor Unions: Doctrines and Programs, 19 pp.

FRENCH, per, Congo-Afrique, Vol 6, No 5, May 1966, pp. 234-255.  
JPRS 36191

Resolutions of Fourth National Congress of the Union of Congolese Workers, 8 pp.

FRENCH, per, Etudes Congolaises, Vol IX, No 2, Mar-Apr 1966, pp. 73-80.  
JPRS 36172

Dim Future Foreseen for Congo (Leopoldville) University Graduates, by Espoir Amonakala, 5 pp.

FRENCH, np, La Gauche, Vol 10, No 20, 21 May 1966, p. 9.  
JPRS 36049

Progress Requires People's Total Commitment, 5 pp.

FRENCH, np, Horoya, 24 May 1966, pp. 1-2.  
JPRS 36103

President Toure On the Guinean Concept of Education, by Sekou Toure, 6 pp.

FRENCH, np, Horoya, 31 May 1966, pp. 1-3.  
JPRS 36172

Africa  
Sociological (Contd)

Law Establishing Family Assistance Program for Wage Earners in the Central African Republic, 9 pp.

FRENCH, per, Journal Officiel de la Republique, 1 Jul 1965, pp. 487-491.

JPRS 36172

The Harrist Churches and Ivory Coast Nationalism, by Ernest Amos-Djoro, 10 pp.

FRENCH, per, Le Mois en Afrique, Vol 1, No 5, May 1966, pp. 26-47.

JPRS 36172

The Practice of Mahdism in Africa, by Pierre Rondot, 11 pp.

FRENCH, per, Le Mois en Afrique, Vol 1, No 5, pp. 48-60.

JPRS 36172

Past and Present of Religious Innovations in Congo (Leopoldville), by Caludine Vidal, 18 pp.

FRENCH, per, Le Mois en Afrique, Vol 1, No 5, May 1966, pp. 61-79.

JPRS 36172

The Toko Church and the Angolan Liberation Movement, by Alfredo Margarido, 15 pp.

FRENCH, per, Le Mois en Afrique, Vol 1, No 5, May 1966, pp. 80-97.

JPRS 36172

Muslim Sects and Negro-African Civilizations, by Jean-Claude Froelich, 8 pp.

FRENCH, per, Le Mois en Afrique, Vol 1, No 5, May 1966, pp. 98-105.

JPRS 36172

The Flup Kings and the Ewag Initiation Rites, by L.-V Thomas, 16 pp.

FRENCH, per, Notes Africaines, No 109, Jan 1966, pp. 10-19.

JPRS 36300

Preliminary Work Completed in Construction of Kouilou Dam in Congo (Brassaville), by P. N. Breil, 7 pp.

FRENCH, np, La Semaine, Vol 15, No 711, 17 Apr 1966, pp. 1 & 6; Vol 15, No 713, 1 May 1966, p. 3.

JPRS 35882

Africa  
Sociological (Contd)

Shortcomings Revealed by Cotton Conference in Moundou, Chad, 7 pp.

FRENCH, per, Le Tchad en Marche, No 13, Apr-May 1966, pp. 2-9.

JPRS 36172

Infrastructure of the Republic of Guinea, by Mamadou Traore Ray Autra, 12 pp.

GERMAN, per, Afrika heute, No 9, 1 May 1966, pp. 132-133.

JPRS 36300

The Development of Bambara As a Trade Language, by Eno Beuchet, 9 pp.

GERMAN, per, Afrika Heute, No 10, 15 May 1966, pp. 143-147.

JPRS 36049

Present Situation at Somali Technical Schools for Accountants and Surveyors, 5 pp.

ITALIAN, np, Corriere della Somalia, 4 May 1966, pp. 3-4.

JPRS 35882

SYL Party Celebrates 23d Anniversary, 5 pp.

ITALIAN, np, Corriere Della Somalia, No 111, 16 May 1966, pp. 1, 4.

JPRS 36172

The Market for Pocket-Books in Africa, by A. Retif, 10 pp.

ITALIAN, per, Nigrezia, No 1, Jan 1966, pp. 10-13.

JPRS 35882

Nigeria: From Slave-Trade to Capitalism, by Francesco Pistolese, 9 pp.

ITALIAN, per, L'Unita, May 11, 1966, p. 11.

JPRS 36172

Soviet Comment on Kenya's Attempt at Building Socialism, by V. Kudryavtsev, 5 pp.

RUSSIAN, np, Investiya, 30 Apr 1966, p. 2.

JPRS 36300

## MIDDLE EAST

### Economic

Development of Agricultural Professional  
Unions, 5 pp.  
ARABIC, np, Al-Ahram, 16 Apr 1966, p. 9.  
JPRS 35666

Conference on Local Administration Discussed  
Yesterday Three Important Proposals for the  
Development of Local Administrative Machinery,  
by Mahmud Sami, 5 pp.  
ARABIC, np, al-Ahram, Apr 20, 1966, p. 7.  
JPRS 35958

Textiles of the 'Victory' Spinning and Weaving  
Company at Alexandria Increased by 280% in  
Four Years, 5 pp.  
ARABIC, np, al-Ahram, 22 Apr 1966  
JPRS 35958

Current Planning and Development in the Syrian  
Arab Region, 15 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 8-12.  
JPRS 36075

1965 National Income First Estimates, 10 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 14-18.  
JPRS 36075

Industry during 1965; Socialist Transformation  
Industrial Problems, Investments, and Produc-  
tion, 10 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 30-34.  
JPRS 36075

The Development of the Traditional and Artistic  
Handicraft Industries, by Hasan Al Hamawi and  
Kamal Al Qasimi, 16 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 36-42.  
JPRS 36075

Activity and Development of Foreign Currency,  
7 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 54-56.  
JPRS 36075

### Middle East Economic (Contd)

Currency Circulation and Factors Affecting It,  
7 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 58-59.  
JPRS 36075

The Development of Banking Activity during  
1965, 13 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 60-64.  
JPRS 36075

The State Budget and Its General Finance,  
13 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 68-74.  
JPRS 36075

Sources of Foreign Exchange, 7 pp.  
ARABIC, np, Al Iqtisadi al-'Arabi, 4 May 1966,  
pp. 78-81.  
JPRS 36075

Syria's Foreign Trade, by Yahya Aroudaki,  
12 pp.  
ARABIC, np, Al Iqtisadi al-'Arabi, 4 May 1966,  
pp. 84-93.  
JPRS 36075

Syria and the Arab Common Market, by Dr.  
Kisham Mitwalli, 5 pp.  
ARABIC, np, Al Iqtisadi al-'Arabi, 4 May 1966,  
pp. 94-97.  
JPRS 36075

Economic Chronicle for the Syrian Region --  
1965, 11 pp.  
ARABIC, np, Al Iqtisadi al-'Arabi, 4 May 1966,  
pp. 100-102.  
JPRS 36075

Most Important Texts Issued during 1965,  
18 pp.  
ARABIC, np, Al Iqtisadi al-'Arabi, 4 May 1966,  
pp. 103-107.  
JPRS 36075

Moroccan Trade Agreements and Export Statis-  
tics, 7 pp.  
FRENCH, np, Note de Documentation, Jan-Feb  
1966, pp. 8-12, 28-31, 32-35, 67, 81, 82, 83,  
85.  
JPRS 36300

Middle East  
Political

The Supreme Administrative Court in Islam,  
by Prof. Mu'tamid Muharram "Abd al-Ghani, 5 pp.  
ARABIC, per, Minbar al-Islam, Vol 23, No 7,  
25 Oct 1965, pp. 184-85.  
JPRS 36203

The Time Has Come for a Socialist-Communist  
Dialogue in Israel, by Eliezer Feiler, 6 pp.  
HEBREW, np, Kol Haam, 29 Apr 1966, pp. 2 & 11.  
JPRS 36119

Representatives of Worker-Parties Discuss the  
Meaning of May Day, 13 pp.  
HEBREW, np, Kol Haam, 29 Apr 1966, pp. 3, 10.  
JPRS 36119

Interviews with Konstantine Simonov, by  
Tamar Peleg, 5 pp.  
HEBREW, np, Kol Haam, 6 May 1966, p. 2.  
JPRS 36119

Yiddish Newspaper in Munich on the Question-  
naire of Kol Haam on the Problem of Israel-  
German Relations, 5 pp.  
HEBREW, np, Kol Haam, 13 May 1966, p. 3.  
JPRS 35982

May Day 1966 Communist Slogans, 5 pp.  
HEBREW, np, Zo Haderekh, 21 Apr 1966, p. 7.  
JPRS 36119

Statement of Syrian CP First Secretary  
by Khaled Bagdas, 7 pp.  
HUNGARIAN, np, Nepszabadsag, 31 May 1966,  
pp. 3 & 4.  
JPRS 36119

Classes and the Class Struggle in Turkey,  
by Yu. N. Rozaliyev.  
RUSSIAN, bk, Klassy i Klassevaya Bor'ba v  
Turtsii, 1966, pp 1-166.  
\*JPRS/DC-12515

Iraq, by S. Lagov, S. Alitovskiy.  
RUSSIAN, bk, Irak, 1966, pp 1-175.  
\*JPRS/SF-4314

A Soviet History of Pakistan, by Yu. V.  
Gankovskiy and L. R. Gordon-Polonskaya, 422 pp.  
RUSSIAN, bk, Istoriya Pakistana, 1961, pp. 1-  
374, 381-382.  
JPRS 36250

Middle East  
Sociological

What Is the Best Way to Check the Accounts  
of More than 3600 Cooperatives? by Mukarram  
Muhammad Ahmad, Sami Mutawalli and Sa'id Abd al-  
Ghani, 6 pp.  
ARABIC, np, al-Ahram, 19 Apr 1966, p. 7.  
JPRS 35958

Rural Household Industry in Syria, by Marwan  
Sahaldawi, 9 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 44-49.  
JPRS 36075

Arab Communists Call for Unification of Arab  
Progressive Forces against the Conspiracies  
of Colonialism and Reactionism, 8 pp.  
ARABIC, np, al-Nida, 20 May 1966, pp. 1 & 4.  
JPRS 36101

Our Attitude Toward the World Jewish Congress,  
by Uzi Burstein, 8 pp.  
HEBREW, np, Zo Haderekh, 37, 5 May 1966, p. 4.  
JPRS 36119

FAR EAST

Economic

The Self-Reliant Way To Develop the Textile  
Industry in China, by Li Chu-p'ing, 7 pp.  
CHINESE, per, Ching-chi Tao-pao, No 963,  
4 Apr 1966, pp. 12-14.  
JPRS 36114

More on Rebirth Through Self-Reliance,  
by Chen Yung-kwei, 10 pp.  
CHINESE, per, Ching-chi Yen-chiu, No 3,  
25 Mar 1966, pp. 29-33.  
JPRS 35900

How to Make Good Steel, by Wang Ming-chang,  
11 pp.  
CHINESE, per, Ching-chi Yen-chiu, 25 Mar  
1966, pp. 59-64.  
JPRS 35900

**Far East  
Economic (Contd)**

Sail Transport Co-ops To Exploit Latent Capacities and Fulfill Tasks for 1966, by Chang Wei-mo, 7 pp.  
CHINESE, per, Shui-yun, No 2, 7 Feb 1966, pp. 21-23.  
JPRS 35874

How To Handle Cargo in Shipment, 6 pp.  
CHINESE, per, Shui-yun, No 2, 7 Feb 1966, pp. 31-33.  
JPRS 35874

Austerity Drive Yields Initial Results, 7 pp.  
CHINESE, per, Shui-yun, No 3, 7 Mar 1966, pp. 5-7.  
JPRS 35949

Ready for Revolutionary Progress, 8 pp.  
CHINESE, per, Shui-yun, No 3, 7 Mar 1966, pp. 14-17.  
JPRS 35949

Use of Dredged Subsoil As Materials to Build River Bed Infrastructures, 5 pp.  
CHINESE, per, Shui-yun, No 3, 7 Mar 1966, pp. 31-33.  
JPRS 35949

Translations from Ti-li Hsueh-pao.  
CHINESE, per, Ti-li Hsueh-pao, Vol 32, No 1, 16 Mar 1966, pp 1-94.  
\*JPRS/NY-13354

Management Leadership At the Yen Phu Power Plant, by Vu Dang Sieu, 7 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 64-68.  
JPRS 35952

Leadership Experiences of the Party Unit of the Hoang Van Thu Paper Mill, by Tran Phu Tuyen, 7 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 69-73.  
JPRS 35952

**Far East  
Economic (Contd)**

Strengthen Direction of Goods Circulation and Distribution to Serve and Stimulate Strong Development of Production and to Serve Combat and People's Livelihood More Satisfactorily, by Pham Hung, 25 pp.  
VIETNAMESE, per, Hoc Tap, No 5, May 1966, pp. 10-29.  
JPRS 36012

How to Increase Crop Cultivation, Animal Husbandry, and Agricultural Labor Productivity, by P. V., 25 pp.  
VIETNAMESE, np, Nhan Dan, 9 and 10 May 1966, pp. 2-3.  
JPRS 36245

Continue to Carry Out the Grain Obligation Stabilization Policy in 1966-1967, by Tran Van Hien, 9 pp.  
VIETNAMESE, np, Nhan Dan, 21 May 1966, p. 2; 22 May 1966, p. 2.  
JPRS 36232

There Must Be Water-Resources Development Regardless of the Situation, by Ha Ke Tan, 5 pp.  
VIETNAMESE, np, Nhan Dan, No 4440, 3 June 1966, p. 2.  
JPRS 36245

**Political**

The Victory in Rebuilding Nan-hui Is the Victory of Mao Tse-Tung's Thought, by Wang Chih-ch'i, 6 pp.  
CHINESE, per, Ching-chi Yen-chiu, 25 Mar 1966, pp. 34-36.  
JPRS 35900

Political Geography, by Chang Chi-Yun.  
CHINESE, bk, Cheng-ch'ih Ti-li-hsueh, Taipei Taiwan, Dec 1965, 91 pp.  
\*JPRS/DC-12458

The Significance of Ideological-Theoretical Struggles and the Responsibility of Zenai, by Satoshi Yonehara, 33 pp.  
JAPANESE, per, Zenai, No 251, Jun 1966, pp. 18-31.  
JPRS 36230

**Far East**  
**Political (Contd)**

Foreign Economic Relations of the Democratic Republic of Vietnam, by I. M. Shchedrov. RUSSIAN, bk, Kratkie Soobshcheniia Instituta Narodov Azii Ak Nauk SSSR, Vol LIX, 1961, pp. 69-81.  
RAND

The Only Correct Stand on the Settlement of the Vietnam Problem, 7 pp.  
VIETNAMESE, per, Hoc Tap, No 4, 1966, pp. 1-6.  
JPRS 35952

Base-Level "Resist America and Save the Nation" Youth Assault Units, by Le Duc Chinh, 5 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 55-59.  
JPRS 35952

Do A Good Job of the Party Development Work, by Vu Trac, 6 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 60-64.  
JPRS 35952

Let Us Destroy the U.S. Imperialists' False Argument of Being 'Ready To Go Back To the 1964 Geneva Agreement', by Ha Van Lau, 9 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 74-81.  
JPRS 35952

**Military**

Strengthen the Mountain Region Base Area, by Le Quang Ba, 17 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 35-47.  
JPRS 35952

Youth Assault Troop Units, by Nguyen Van Da, 9 pp.  
VIETNAMESE, per, Hoc Tap, No 4, Apr 1966, pp. 48-54.  
JPRS 35952

Instructions for Building Fox Holes, 5 pp.  
VIETNAMESE, np, Nhan Dan, 20 May 1966, p. 3.  
JPRS 36232

**Far East**  
**Sociological**

The Standpoint of Which Class Do the Editorial Departments of Ch'ien-Hsien and Peking Jih-Pao Take? by Ch'i Pen-yu, 14 pp.  
CHINESE, per, Hung-ch'i, No 7, 1966.  
JPRS 36059

Preliminary Research on Agricultural Regions in the Mixed Agro-Pastoral Realm of Kansu and Tsinghai, by Chou Li-san, Wu Chuan-chun, Chao Sung-ch'iao and Sun Ch'eng-lieh, 211 pp.  
CHINESE, bk, Kan-ch'ing Mung-mi Chiao-ts'o Ti-chu Mung-yeh Ch'u-hua Ch'u-pu Yen-chiu, JPRS 36077

Providing Spiritual Food for Revolution to Seamen, 7 pp.  
CHINESE, per, Shui-yun, No 2, 7 Feb 1966, pp. 33-35.  
JPRS 35874

Population and Economy of New Caledonia, by J. Beaujeu-Garnier, 7 pp.  
FRENCH, per, Bulletin de L'association de Geographes Francais, Nos. 334-335, May-June 1965, pp. 2-12.  
JPRS 36179

Review of Experiences At End of School Year, by Pham Quang Hieu, 7 pp.  
VIETNAMESE, per, Giao Duc Cap II, No 6, Apr 1966, pp. 3-5 & 12.  
JPRS 36102

Increasing Cultivation and Animal Husbandry Productivity and Increasing Labor Output in Agriculture, 13 pp.  
VIETNAMESE, np, Nhan Dan, 10 May 1966, p. 2.  
JPRS 36100

All-Army Congress of "Youths Resolved To Win", by P.V., 6 pp.  
VIETNAMESE, np, Nhan Dan, 2 June 1966, p. 2.  
JPRS 36108

**Far East**  
**Sociological (Contd)**

Presidential Decree 57-3 (Concerning the Professions of Physician, Dentist, and Midwife), 35 pp.  
VIETNAMESE, per, Hoi-San Hoi-Dong Quoc-Gia  
Y-Si Doan Viet-Nam, 1965, pp. 4-44.  
JPRS 36067

Ho Chi Minh's Opinion on the Use of Chinese Origin Words, by Hoang Van Hanh, 9 pp.  
VIETNAMESE, per, Tap Chi Van Hoc, No 3, 1966, pp. 43-49.  
JPRS 36102

**LATIN AMERICA**

**Economic**

New Sugar-Cane Strains Developed in Cuba, by Mario Hidalgo Gato, 11 pp.  
SPANISH, per, Agrotecnia de Cuba, No 2, Apr-June 1965, pp. 4-11.  
JPRS 36000

The Industrial Development of Cuba, 25 pp.  
SPANISH, np, Cuba Socialista, May 1966, pp. 94-127.  
JPRS 36090

Percentage Relationships between Crops and Cultivated Area in Venezuela, by Ramon Santa-ella, 21 pp.  
SPANISH, per, GEA - Revista Venezolana de Geografia, Vol II, No 4, Jan-Dec 1962, pp. 25-39.  
JPRS 36163

Cayo Largo Del Sur, by Victor Cassus, 6 pp.  
SPANISH, per, Mar y Pesca, Apr 1966, pp. 5-11.  
JPRS 36000

The Waters Surrounding Cuba, by Victor Boldanov, 8 pp.  
SPANISH, per, Mar y Pesca, Apr 1966, pp. 12-15.  
JPRS 36204

**Latin America**  
**Economic (Contd)**

The Revolution Has Brought an Excellent Merchant Marine to Cuba: The Mambisa Lines, 8 pp.  
SPANISH, per, Mar y Pesca, Apr 1966, pp. 22-25.  
JPRS 36000

Stream Stocking: An Important Task under Way, by Vicente Cubillas, 5 pp.  
SPANISH, np, Mar y Pesca, Apr 1966, pp. 34-40.  
JPRS 36204

Batabano Roadstead, the Camilo Cienfuegos Fishermen's Cooperative, by Onelio Jorge Cardoso, 6 pp.  
SPANISH, per, Mar y Pesca, Apr 1966, pp. 48-53.  
JPRS 36000

Annual Shell Report Analysis of Oil Situation, by Jose Gerbasi, 5 pp.  
SPANISH, np, El Nacional, 8 May 1966, p. D-6.  
JPRS 36041

22nd Annual Assembly of Fedecamaras at Valencia, by Jose Gerbasi, 6 pp.  
SPANISH, np, El Nacional, 15 May 1966, pp. D-6.  
JPRS 36041

The Distribution of Savannas in Venezuela, by Mauricio Ramia, 5 pp.  
SPANISH, per, Revista Venezolana de Geografia, Mar 1964, Vol IV, No 7, pp. 25-32.  
JPRS 35989

Latin America  
Political

Brazilian Communist Party Condemns Fidel Castro, 6 pp.  
FRENCH, per, L'Humanite Nouvelle, Vol 2, No 18, May 1966, pp. 8, 10.  
JPRS 35889

Fidel Castro Denounced as Revisionist by Pro-Chinese Belgian CP, by Jacques Grippe, 8 pp.  
FRENCH, per, La Voix du Peuple, Vol 4, No 16, 22 Apr 1966, pp. 17, 20.  
JPRS 35889

Communist Party in Colombia Seeks Union with Others for National Liberation Front, 6 pp.  
SPANISH, per, Documentos Politicos, No 58, Mar-Apr 1966, pp. 1-7.  
JPRS 36119

Ilanusa Discusses Cuban Participation in the Olympics, by Jose Solis, Marta Rojas and Luis Baez, 11 pp.  
SPANISH, np, Granma, 11 Apr 1966, p. 9.  
JPRS 35947

On the Anniversary of Che Guevara's Leave-Taking Letter, by Carmen Villar, 5 pp.  
SPANISH, np, Juventud Rebelde, 2 Apr 1966, p. 7.  
JPRS 36000

Argentine Communist Party  
A. Ideological Struggle, 6 pp.  
SPANISH, per, Nueva Era, Vol XVIII, No 4(135), May 1966, pp. 1-7.  
JPRS 36230

Argentine Communist Party  
B. Youth Movement, by Hector Santaren, 10 pp.  
SPANISH, per, Nueva Era, Vol XVIII, No 4, May 1966, pp. 36-47.  
JPRS 36230

Argentine Communist Party  
C. Financial Campaign, by Felipe Mesrobian, 6 pp.  
SPANISH, per, Nueva Era, Vol XVIII, No 4(135), May 1966, pp. 65-72.  
JPRS 36230

Argentine Trotskyite Explains Tactics of the Single Front, by J. Posadas, 22 pp.  
SPANISH, per, Voz proletaria, Vol XVIII, No 441, 13 May 1966, pp. 4-7.  
JPRS 36057

Latin America  
Military

Military Service Law - Complete  
PORTUGUESE, rpt. August 1964.  
DIA 2809027866

The Cuban Military Units for Aiding Production, by Luis Baez, 6 pp.  
SPANISH, np, Granma, 14 Apr 1966, p. 8.  
JPRS 36204

Geographic

The Conquest of Amazonia Begins in Araguaia, by Oswaldo Amorim, 10 pp.  
PORTUGUESE, per, O Cruzeiro, 20 May 1966, pp. 51-66.  
JPRS 36041

Classification of the Venezuelan Andean Climatic Zones According to the Koeppen System, by Major Alberto Contramestre Torres, 28 pp.  
SPANISH, per, GEA -- Revista Venezolana de Geografia, Vol 1, No 3, Dec 1961, pp. 209-240.  
JPRS 36166

Geomorphological, Geological and Topographical Description of Uruguay, by Jorge Chebataroff, 69 pp.  
SPANISH, monograph, Tierra Uruguaya, 1960, pp. 51-132.  
JPRS 35887

Sociological

Colombia to Request Thirteen Billion Peso Loan from International Organizations for Development, by Gabriel Ortiz, 6 pp.  
SPANISH, np, El Tiempo, Vol 56, No 18,997, 22 May 1966, pp. 1, 28.  
JPRS 35989

## SCIENTIFIC

### Aerospace

Methods of Investigating the Vestibular Apparatus, by R. M. Bayevskiy.  
RUSSIAN, rpt, Fiziologicheskiye Metody v Kosmonavtike, Chapter 10, 1965, pp 246-250.  
NASA TT F-10,125

Cosmonaut Training and Selection Determined by Profession rather than Physical Condition, by N. Goruvskiy.  
RUSSIAN, np, Izvestiya, No 70, p3, Cols 2-5, 1965, 25 Mar 1965.  
\*FTD-HT-66-427

Results of Physiological and Biochemical Examinations of Members of the Voskhod Space-ship Crew, by I. S. Balakhovskiy, P. V. Vasil'yev, I. I. Kas'yan, and I. G. Popov, 15 pp.  
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Biologicheskaya, No 2, Mar/Apr 1966, pp. 212-220.  
JPRS 36227

Energy Accumulator in Optimization Problems of Spaceflight With Limited Power, by G. L. Grodovskiy, et al.  
RUSSIAN, rpt, Makopital' Energiy v Zadachakh Optimizatsii Kosmicheskogo Poleta s Ogranichennoy Moshchnost'yu, 1965, 27 p.  
\*NASA TT F-10,132

Spacecraft "Magnetic Walls", by A. Petrov.  
RUSSIAN, per, Nauchno-Tekhnicheskiye Obshchestva SSSR, 1964, No 6, pp 60-61.  
\*FTD-HT-66-440

Radiation Safety During Space Flights, by V. G. Bobkov, V. P. Demin, et al, 416 pp.  
RUSSIAN, bk, Radiatsionnaya Bezopasnost' pri Kosmicheskikh Poletakh, Moscow, 1964. 9231458-V  
NASA TT F-356

The Effects of Space Flight Factors on the Function of the Central Nervous System, by N. N. Livshits, et al.  
RUSSIAN, rpt, Vliyaniye Faktorov Kosmicheskogo Poleta na Funktsii Tsentral'nogo Mozgovogo Sistemy, 1966, 272 pp.  
NASA TT F-413

### Scientific Aerospace (Contd)

Description of Flight Exercises, by Piro Nace, 5 pp.  
ALBANIAN, np, Ylli, Apr 1966, pp. 11-13.  
JPRS 36235

Experimental Study of the Combustion of Ammonium Perchlorate Spheres in a Gaseous Fuel Flow, by L. Nadaud.  
FRENCH, per, La Recherche Aerospatiale, No 108, 1965, pp 39-51.  
Dept of Navy Tr 4747/APL/JHU T-1816

Linear Pyrolysis rate of Ammonium Perchlorate in a One-Dimensional Flow, by M. Guinet  
FRENCH, per, La Recherche Aerospatiale, No 109, 1965, pp 41-49.  
Dept of Navy Tr 4745/APL/JHU T-1791

New Technologies and the Utilization of Space Research, by O. Bauschinger.  
GERMAN, rpt, Paper Presented at a Symposium on the Utilization of Space Research, Held in Cologne, May 14, 1966, 22 pp.  
\*NASA TT F-10,191

### Agriculture

The Temperature Regime of Soils, by A. M. Shul'gin.  
RUSSIAN, bk, 1965, 218 pp.  
NLL

A Decree on Land Melioration, 5 pp.  
RUSSIAN, np, Izvestiya, 28 May 1966, p. 1.  
JPRS 36099

On the Properties of Potato Starch Irradiated in Gaseous Media, by I. I. Putilova, et al.  
RUSSIAN, per, Iz VUZ Pischhevaya Tekhnologiya, No 1, 1966, pp 48-52.  
\*ACSI J-0236  
ID 2204034266

Cybernetics in Agriculture, by A. F. Chudnovskiy, et al.  
RUSSIAN, bk, Kibernetika v Sel'skom Khozyaistve, 1965, 152 pp.  
NLL R 39784

Scientific  
Agriculture (Contd)

The Absolute Abundance of the Perch and  
Its Ichthyomass in Small Lakes, by  
E. V. Burmakin,  
RUSSIAN, per, Trudy Soveshchani,  
Vyp 13, 1961, pp 235-237.  
Dept of Inter No  
SH211 L9 N.s. No 55

Syrian Agriculture, 16 pp.  
ARABIC, np, Al-Iqtisadi al-'Arabi, 4 May 1966,  
pp. 20-26.  
JPRS 36075

Automation Problems in Agriculture, by Stoil  
Stankev, 5 pp.  
BULGARIAN, per, Mekhanizatsiya i elektrifikatsiya,  
No 5, May 1966, pp. 18-19.  
JPRS 36133

Major Concepts of Modern Preservation of  
Food Products, by F. Kuprianoff,  
CZECH, per, Prumysl Potravin, No 4,  
1966, pp 195-197.  
\*ACSI J-0316  
ID 2204036966

Determination of a Quality Parameter for  
Rye (Bread), by R. Heckel, 9 pp.  
GERMAN, per, Die Lebensmittel-Industrie,  
Vol XIII, No 3, 1966, pp 100-105.  
ACSI J-0314  
ID 2204036766

Agricultural Acaridicide Composite,  
by Taniguchi, Takuzo, 7 pp.  
JAPANESE, Patent No 8147, 5 Jun 1963.  
SA Code-P-303

Prognoses of the Appearance of Some Plant  
Diseases and Pests in Poland in 1966, by F.  
Kagan, Dr. K. Piekarczyk and A. Studzinski,  
11 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 8,  
16-30 Apr 1966, pp. 20-22.  
JPRS 36072

The Classification of Slaughter Animals,  
by Dr. Witold Buchwald, 7 pp.  
POLISH, per, Nowe Rolnictwo, Vol 15, No 8,  
16-30 Apr 1966, pp. 26-28.  
JPRS 36072

Scientific  
Agriculture (Contd)

Actual Possibilities for Expansion of Animal  
Husbandry 1966-1970, by Antoni Leopold, 5 pp.  
POLISH, per, Zycie Ekonomiczne, No 22, 29  
Mar 1966, p. 6.  
JPRS 36131

Perspectives of Scientific Research in Zoo-  
technology, by Vasile Herdea, 6 pp.  
RUMANIAN, per, Lupta de Clasa, Vol 46, No 4,  
Apr 1966, pp. 95-99.  
JPRS 36037

Current Tasks of Agricultural Research, by N.  
Giasan, 10 pp.  
RUMANIAN, per, Probleme Agricole, No 3, Mar  
1966, pp. 4-12.  
JPRS 36084

Problems in the Improvement of Agricultural  
Management and Planning, by Barbu Popescu,  
12 pp.  
RUMANIAN, per, Probleme Agricole, No 3, Mar  
1966, pp. 13-22.  
JPRS 36131

Scientific Research and Technological Advances  
in Agriculture, by Dr. Irimie Staicu, 5 pp.  
RUMANIAN, per, Romania libera, Vol XXIX,  
No 6695, 26 Apr 1966, pp. 1, 3.  
JPRS 36072

Food Preservation by Irradiation, I. Evolution and  
Present Status in the World, by M. Del van Cob,  
Nicasio Ortin Sune. 63 pp.  
SPANISH, rpt, Conservacion de Alimentos por  
Irradiacion. I. Evolucion y Estado Actual en el  
Mundo, Madrid, 1965, 9233280-V  
AEC-tr-6690

Scientific  
Biological & Medical Sciences

Photosynthetic Bacteria, by E. N. Kondrat'eva.  
RUSSIAN, bk, 1965, 243 pp.  
NLL

The Role of DNA in the Differentiation of Somatic Cells in the Embryogenesis of Higher Vertebrates, by Yu. A. Magakyan, 5 pp.  
RUSSIAN, per, Akademii nauk Armyanskoy SSR -- Biologiya, Vol 19, No 2, 1966, pp. 21-25.  
JPRS 36074

The Problem of the Continuous Cultivation of Microorganisms -- Producers of Antibiotics, 18 pp.  
RUSSIAN, per, Antibiotiki, Vol IX, No 7, 1964, pp 565-572.  
CFSTI TT-66-10885

Inhibition of Replication of Venezuelan Equine Encephalomyelitis Virus with Use of Puromycin, by V. M. Zhdanov, F. I. Ershov, 9 pp.  
RUSSIAN, per, Antibiotiki, Vol X, No 3, 1965, pp 255-259.  
CFSTI TT-66-60875

Structural Organization of the Intracardial Nervous Apparatus, by I. A. Chervova, 15 pp.  
RUSSIAN, per, Arkhiv Anatom, Gistolog i Embriol, Vol XLVIII, No 2, 1965, pp 60-67.  
CFSTI TT-66-60322

Post-Mortem Angiography in Pulmonary Hypertension, by G. S. Kryuchkova, 12 pp.  
RUSSIAN, per, Arkhiv Patol, Vol XXVI, No 12, 1964, pp 52-58.  
CFSTI TT-66-60323

Certain Mechanical Magnitudes of Perception Characteristic of An Animal Organism, by O. G. Gerasenko, N. A. Chakhovskiy.  
RUSSIAN, per, Avtometriya, No 2, 1965, pp 11-17.  
\*NASA TT F-10,138

Talks on Nutrition, by A. A. Pokrovskiy, 223 pp.  
RUSSIAN, bk, Besedy o pitanii, 1964, pp. 1-290.  
JPRS 35946

Bioacoustics of Fish, by V. R. Protasov, 214 pp.  
RUSSIAN, bk, Bioakustika Ryb, 1965, pp. 3-297.  
JPRS 35976

Scientific  
Biological & Medical Sciences (Contd)

Effects of Acridine Orange and Safranin on Kinetics of the Enzyme-Substrate Complex of Actomyosin, by E. A. Burshtein, R. G. Lyudkovskaya, et al.  
RUSSIAN, per, Biofiz, Vol X, No 2, 1965, pp 217-221.  
CFSTI TT-66-60870

Determination of the Quality of Gluten by its Physico-Chemical Properties, by A. B. Vakar.  
RUSSIAN, per, Biokhimiya Zerna, No. 7, 1964, pp 3-62.  
NLL RTS 2903

The Condition of Amylase in the Processes of Ripening and Germination of Wheat Grain, by T. B. Darkanbaev.  
RUSSIAN, per, Biokhimiya Zerna, No 7, 1964, pp 144-150.  
NLL RTS 2904

Sensual (Philos: Cognition/Epistemology Knowledge), by F. I. Georgiev, V. I. Dubovskoy.  
RUSSIAN, bk, Chuvstvennoe Poznaniye, 1965, pp 1-237.  
\*FTD-HT-66-431

Pleuston Biocenosis of Siphonophora by A. Savilov.  
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CX, No 3, 1956, pp 476-479.  
Dept of Inter No  
GCI E57 No 51.

Studies on Work Fitness and Work Arrangements, by P. A. Makhavetskiy, 18 pp.  
RUSSIAN, bk, Ekspertiza trudosposobnosti i trudooustroystvo pri nervnykh i psikhicheskikh zabolevaniyakh, 1965,  
JPRS 36164

The Teratogenic Action of Triparanol, A. I. Yakovleva, N. G. Shakhnazarova, 9 pp.  
RUSSIAN, per, Farmakol i Toksikol, Vol XXVIII, No 1, 1965, pp 108-111.  
\*FTSI TT-66-60406

Scientific  
Biological & Medical Sciences (Contd)

Effect of Local Anesthetics on Adenosine Triphosphatase Activity of Brain Tissue, by N. I. Kuzhman, E. A. Bisyarina, et al. RUSSIAN, per, Farmakol i Toksikol, Vol XXVIII, No 2, 1965, pp 228-230. CFSTI TT-66-60894

Physiological Principles of Conditioning of a Human Organism, by M. Ye. Marshak, 136 pp. RUSSIAN, bk, Fiziologicheskiye Osnovy Zakalivaniya Organizma Cheloveka, 1965, 2nd Edition, pp. 1-151. JPRS 35864

Variations of Blood Sugar and Lactic Acid Levels in Athletes Performing Standard Tasks with the Establishment of Good Form, by N. N. Yakovlev, A. F. Krasnova. RUSSIAN, per, Fiz Zhur, Vol XLVIII, No 10, 1962, pp 1265-1269. NLL RTS-2885

The Effect of Ultrasound and High-Frequency Noise on the Blood Sugar Level, by Z. Z. Ashbel', 5 pp. RUSSIAN, per, Gigiyena Truda i Professional'nyye Zabolovaniye, No 2, 1965, pp. 29-32. JPRS 36252

The Toxic Properties of Hexafluorodichlorocyclopentane, by L. V. Buevich, E. R. Uzhdavini, 18 pp. RUSSIAN, per, Gigi Truda i Profession Zabol, Vol IX, No 5, 1965, pp 39-44. CFSTI TT-66-60895

Analysis of Bronchoscopic Symptoms of Pulmonary Cancer with a Digital Electronic Computer, by G. I. Lukomskiy, Yu. V. Surin, A. L. Brudno, A. S. Kronrod and P. Ye. Kunin, 8 pp. RUSSIAN, per, Grudnaya Khirurgiya, No 2, pp. 74-79. JPRS 36162

The History of the Blind, by A. G. Tomilin. RUSSIAN, bk, Istoriya Slepogo Kashalota, Moskva, 1965, pp 1-191. \*FTD-HT-66-434

A Mathematical Method of Taxonomy, by P. Gambaryan. RUSSIAN, per, Iz Ak Nauk Arm SSR, Biol Nauk, Vol XVII, No 12, 1964, pp 47-53. NLL RTS-3101

Scientific  
Biological & Medical Sciences (Contd)

Problems Concerning the Physical and Physico-chemical Basis of Muscular Contraction, by G. M. Frank. RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biol, Vol XXX, 1965, pp 335-359. CFSTI TT-66-60897

Motor Function of the Dorsal (Isolated) and Ventral Blind Projections in the Rumen of the Multi-Chambered Stomach, by P. I. Zharebtsov, V. F. Vraikin. RUSSIAN, per, Izvestiya Timiryazev Sel'akad, No 1, 1962, pp 153-166. NLL RTS 2911

Research into Buffalo Milk Fat and Its Fractions, by G. V. Tverdokhlev, et al. RUSSIAN, per, Iz VUZ Pishchevaya Tekhnologiya, No 1, 1966, pp 25-30. \*ACSI J-0182 ID 2204032966

Chemical Dosimetry of Ionizing Radiations, by A. M. Kabakchi, Ya. I. Lavrentovich, et al. 162 pp. RUSSIAN, bk, Khimicheskaya Dozimetriya Ioniziruyushchikh Izlucheniye, Kiev, 1963, pp 1-76; 86-92; 105-135. 9700461-V FTD-TT-65-420

The Functional State of the Adrenal Cortex and its Potential Reserves during Acth Stimulation in Patients with Peptic Ulcer, by E. V. Andrukhiv, 7 pp. RUSSIAN, per, Klini Medit, Vol XLII, 1964, No 5, pp 71-75. NLL RTS-2993

Effect of Anticoagulants on Vascular Permeability in Myocardial Infarction and Angina Pectoris, by V. G. Chistyakova, 11 pp. RUSSIAN, per, Klini Medit, Vol XLIII, No 3, 1965, pp 68-72. CFSTI TT-66-60418

Functional State of the Cardiovascular System in Women Working in Spinners, by I. I. Filatov, 10 pp. RUSSIAN, per, Klini Medit, Vol XLIII, No 3, 1965, pp 72-75. CFSTI TT-66-60419

Combined Effect of Space-Flight Factors on Certain Functions of an Organism, by G. M. Frank, N. N. Livshits, 81 pp. RUSSIAN, rpt, Kombinirovannoye Vozdeystviye Faktory Kosmicheskogo Poleta na Nekotoryye Funktsii Organizma, 14-18 Jun 1965, 61 pp. 9233102 AEC UCRL-Trans-1232

Scientific  
Biological & Medical Sciences (Contd)

Investigation of the Use of Sorbic Acid for the Preservation of Fruit and Vegetable Products, by Ya. Osin'ska, L. Kosevska.  
RUSSIAN, per, Konserv. Ovoshch. Prom., Vol 20, No 6, 1965, pp 34-36.  
NLL Ref: 5828.4 1965 (5803)

Species Composition and Quantitative Distribution of the Zooplankton off South-West Greenland, E. A. Pavshchik.  
RUSSIAN, rpt, Materials of the Session of the Scientific Council of PINRO on the Results of Investigations Carried out in 1962-63, Murmansk, 1964.  
Dept of Inter No  
SH211 L9 n.s. no 58

Methodological Problems of Health and Medical Statistics, by A. M. Merkov, 203 pp.  
RUSSIAN, bk, Metodologicheskiye Voprosy Sanitarnoy i Meditsinskoy Statistiki, 1965, pp. 1-228.  
JPRS 36231

The Influence of Low Temperature on Microorganisms. II. The Influence of Low Temperature on the Development of Moulds, by F. M. Chistyakov, Z. Z. Bocharova.  
RUSSIAN, per, Mikrobiologiya, Vol VI, No 9-10, 1957, pp 1293-1309.  
\*NASA TT F-10,144

Influence of Low Temperatures on the Development of Microorganisms. III. Influence of Low Temperatures on the Development of Bacteria and Yeasts, by F. M. Chistyakov, G. L. Noskova.  
RUSSIAN, per, Mikrobiologiya, Vol VII, No 5, 1958, pp 565-578.  
NASA TT F-10,142

The Influence of Low Temperature on the Development of Microorganisms. IV. The Influence of Low Temperature on the Development of Moulds, by F. M. Chistyakov, Z. Z. Bocharova.  
RUSSIAN, per, Mikrobiologiya, Vol VI, No 7, 1956, pp 838-842.  
\*NASA TT F-10,145

Growth of Bacteria of Natural Rubber, by R.J.A. Hendry, 15 pp.  
RUSSIAN, per, Mikrobiol, Vol XXI, No 2, 1952, pp 146-154.  
RAPRA

Scientific  
Biological & Medical Sciences (Contd)

An Evaluation of Contemporary Parapsychology, by P. Simonov, 10 pp.  
RUSSIAN, per, Nauka i Zhizn', No 4, Apr 1966, pp. 54-58.  
JPRS 35969

Biometric Studies of the Cimmerian Representatives of Genus Viviparus, by V. Ya. Taboyakova.  
RUSSIAN, per, Paleontolog Zhur, No 2, 1960, pp 97-109.  
NLL RTS-3154

Immunological Indices from Histomorphologic Study of Liver of Rats of Various Ages Subjected to Combined Influence of Carbon Tetrachloride and Hepatocytotoxic Mitochondrial Serum, by S. A. Korol, G. A. Rodionov, 25 pp.  
RUSSIAN, per, Patol Fiziol i Eksperimen Terap, Vol IX, No 2, 1965, pp 54-60.  
CFSTI TT-66-60896

The Investigation of Biological Systems with Many Variable Characteristics, by L. K. Vykhandu.  
RUSSIAN, per, Primenenie Matematicheskikh Metodov v Biologii, Vol 3, 1964, pp 19-22.  
NLL RTS 2881

The Phenomenon of Nuclear Fragmentation of Monocytes in the Diagnosis of Atypical Forms of Infectious Mononucleosis, by K. Mushetsyanu, V. Mushetsyanu, 6 pp.  
RUSSIAN, per, Problemy Gematol i Perelivan Krovi, Vol X, No 2, 1965, pp 35-36.  
CFSTI TT-66-60314

Problems in Aerospace Medicine; Data on the Conference Held 24-27 May 1966, by V. V. Parin.  
RUSSIAN, bk, Problemy Kosmicheskoy Konferentsii Materialy Konferentsii (24-27 May 1966), Moscow, 1966, 414 pp.  
\*JPRS/DC-12459

Problems of Space Medicine, by V. V. Parin, RUSSIAN, bk, Problemy Kosmicheskoy Meditsiny, Moscow, 1966, 416 pp.  
\*NASA TT F-440

Drugs for Radiation Protection, by L. A. Tiunov, G. A. Vasil'yev, et al. 581 pp.  
RUSSIAN, bk, Protivoluchevyye Sredstva, 1964, 9700463-V  
FTD-TT-65-556

Scientific  
Biological & Medical Sciences (Contd)

Effect of Common Salt Solution Upon  
the Gastric Secretion in Pigs,  
by A. N. Cheredkova.  
RUSSIAN, per, Sbornik Rabot Leningrad  
Vet. Inst., Vol 19, 1959, pp 188-194.  
NLL RTS 2929

Changes in the Submicroscopic Structure of  
Cells of Walker's Carcinoma during its Regres-  
sion Induced by Sarvolysine,  
by V. G. Proshchenko, 21 pp.  
RUSSIAN, per, Sovet Medit, Vol XXVIII, No 5,  
1965, pp 80-84.  
CFSTI TT-66-60869

Characteristics of Disturbances of Vascular  
Tone in Man following Chronic Irradiation,  
by V. P. Zhmurkin, E. A. Denisova, et al, 12 pp.  
RUSSIAN, per, Terapev Arkhiv, Vol XXXVII, No 2,  
1965, pp 46-51.  
CFSTI TT-66-60318

Use of a Metopirone Test to Investigate  
the Function of the Hypophysis--Adrenal  
Cortex System in Patients Receiving Prolonged  
Corticosteroid Therapy, by E. V. Fleishman.  
RUSSIAN, per, Terapev Arkhiv, Vol XXXVII,  
No 2, 1965, pp 75-80.  
CFSTI TT-66-60319

Investigations of Control Processes  
in Living Organisms and Ways of Creating  
New Cybernetic Systems, by M. A. Khvedelidze.  
RUSSIAN, per, Trudy Instituta Kibernetiki,  
AN Gruzii, 1963, Vol 1, pp 169-190.  
\*72D-M-66-66

Zooplankton of the Dniester and its  
Changes under Conditions of the Dubossary  
Reservoir, by V. D. Grimal'skiy.  
RUSSIAN, per, Trudy vi Soveshchaniya  
Po Probl. Biolog. Vnutrennikh Vod,  
1959, pp 365-370.  
NLL RTS 2929

Special Features of the Formation of the  
Hydrobiological Regime in Dubossary  
Reservoir, by M. F. Yaroshenko, A. I.  
Naberezhnyi.  
RUSSIAN, per, Trudy vi Soveshchaniya  
Po Probl. Biolog. Vnutrennikh, Vod.  
1959, pp 371-377.  
NLL RTS 2928

Scientific  
Biological & Medical Sciences (Contd)

The Quantitative Distribution of Plankton  
in Southeastern Bering Sea in the Summer  
of 1958 and 1959, by I. M. Meshcheriakova.  
RUSSIAN, per, Trudy Vses Nauchno-  
Issledovatel'skogo Instituta Rybnogo  
Khoziaistvo i Okeanografii, 49, Vol LI,  
pp 141-150, 1964  
Dept of Inter No  
ACS E57 No 174

Effect of Certain Forms of Nitrogen on the  
Productivity of *Scenedesmus Quadricauda* (Turp),  
by L. H. Lytvynenko, O. H. Volovsk.  
RUSSIAN, per, Ukrains Botan Zhur, Vol XIX, No 3,  
1962, pp 28-33.  
NLL RTS-2256

The Tasks and Research Programme of the  
New Scientific Council, by V. N. Sukachev.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR,  
No 10, 1965, pp 55-57.  
NLL Shelfmark: 0026 Holding 1942-

Accumulation of Glutamine by Tumors and its  
Incorporation into Proteins of Tumor and  
Normal Cells, by K. A. Perevorzhikova,  
A. P. Belusov, et al.  
RUSSIAN, per, Voprosy Medit Khim, Vol XI, No 2,  
1965, pp 32-36.  
CFSTI TT-66-60889

Natural Forms and Mechanism of Action of Folic  
Acid and Participation of Vitamin B12 in this  
Mechanism, by A. V. Trufanov.  
RUSSIAN, per, Voprosy Medit Khim, Vol XI, No 3,  
1965, pp 3-10.  
CFSTI TT-66-60899

Acclimatization to the Far North, by G. M.  
Danishevskiy, 5 pp.  
RUSSIAN, per, Zdorov'ye, No 4, 1966, pp. 4-5.  
JPRS 36229

Matort-Produced Diet for Cattle,  
by Heinz Wetterau, 4 pp.  
GERMAN, per, Urania, No 3, 1966, pp 29-31.  
ACSI J-0181  
ID 2204032866

Scientific  
Biological & Medical Sciences (Contd)

Life Span of Plants and their Organs,  
by N. I. Dubrovitskaya.  
RUSSIAN, per, Uspekhi Sovremennoi Biologii,  
Vol 43, No 1, 1957, pp 104-114.  
NLL RTS 2956

New Data Relating to the Biology of the Cau-  
casian Goby--*Pomatoschistus caucasicus*  
(KAWRAJSKY) Berg--from the Foredelta of the  
Volga, by A. F. Koblitskaya.  
RUSSIAN, per, Voprosy Ikhtiolog, Vol I, No 2(19)  
1961, pp 253-261.  
NLL RTS-3108.

Conference on Biological Principles of Use  
of Fish Reserves in Reservoirs of Central  
Asia and Kazakhstan, by N. Z. Khusainova,  
5 pp.  
RUSSIAN, per, Voprosy Ikhtiologii, Vol 6,  
No 1 (38) 1966, pp. 186-188.  
JPRS 35816

Investigation of the Free Amino Acids and  
Phosphorus Fractions of the Blood After  
Administration of Streptomycin and Phthivazid,  
by M. A. Chertkova, Zh. Z. Kharakter.  
RUSSIAN, per, Voprosy Medit Khim, Vol XI, No 3,  
1965, pp 40-45.  
CFSTI TT-66-60865

Electrophoretic Separation of Proteins of  
Human Mammary Gland Tumors, by A. N. Parshin,  
T. A. Goryukhina, et al.  
RUSSIAN, per, Voprosy Onkolog, Vol XI, No 5,  
1965, pp 40-43.  
CFSTI TT-66-60888

Induction of Tumors of the Spinal Meninges  
of Rabbits by Radioactive Cobalt,  
by I. D. Dimant, G. M. Loktionov, et al, 34 pp.  
RUSSIAN, per, Voprosy Onkolog, Vol XI, No 5,  
1965, pp 46-54.  
CFSTI TT-66-60367

Hygienic Assessment of a New Type of  
Margarine, by N. N. Aleksandrova, et al.  
RUSSIAN, per, Voprosy Pitaniya, No 2,  
1966, pp 68-71.  
\*ACSI J-0237  
ID 2204034366

Occupational Pathology, by A. P. Shitakova,  
21 pp.  
RUSSIAN, bk, Voprosy Profpatologii, pp. 169-  
175; 176-182; 183-187;  
JPRS 36192

Scientific  
Biological & Medical Sciences (Contd)

The Antibody Accumulation Rate in Man  
in Early Stages After Vaccination and  
Revaccination Against Tick-Born Encep-  
halitis, by M. P. Chumakov.  
RUSSIAN, per, Voprosy Virusologii, No 5,  
1964, pp 601-604.  
NLL RTS 2910

Etiology of the 1965 Influenza Epidemic, by  
V. D. Solov'yev, N. R. Gutman, L. I. Neklyudova,  
A. A. Pichkovskaya and G. S. Churkin, 9 pp.  
RUSSIAN, per, Voprosy Virusologii, No 2, Mar/  
Apr 1966, pp. 197-202.  
JPRS 36025

Perception and the Conditioned Reflex,  
by Evgenii Nikolayevich Sokolov, 309 pp.  
RUSSIAN, mono, Vospriyatie i Uslovnii  
Refleks, Moscow, 1958, 330 pp.  
NACN

Study of Immunologic Properties of Rickettsia  
Prowazeki Soluble Antigen. Rept. II, Isolation  
of Soluble Antigen Rickettsia Prowazeki by  
Means of Deae-Cellulose and its Immunologic  
Significance, by E. P. Lukin, N. N. Vasilev,  
et al, 18 pp.  
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immuno-  
biol, Vol XLII, No 5, 1965, pp 114-119.  
CFSTI TT-66-60898

Formation of the Zooplankton and Bottom  
Fauna of Simferopol Reservoir in the Crimea,  
by G. B. Melnikov, I. P. Lubyantov.  
RUSSIAN, per, Zool Zhur, Vol XXXVII, No 6,  
1958, pp 820-831.  
NLL RTS-2998

A New Model of volumenometer for Rapid  
and Precise Plankton Volumetric Determination  
Under Field Conditions, by V. A. Iashnov.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol XXXVIII,  
(11) 1959, pp 1741-1744.  
Dept of Inter No  
GCI ES7 No 50

Changes in the Fauna of Lake Arpilich as  
a Result of its Conversion into a reservoir,  
by T. M. Meshkova.  
RUSSIAN, per, Zoologicheskii Zhurnal,  
Vol 39, No 11, 1960, pp 1597-1606.  
NLL RTS 2996

Scientific  
Biological & Medical Sciences (Contd)

Entomological, Ornithological, and  
Hydrobiological Research,  
RUSSIAN, per, Zoologicheskii Zhurnal,  
Vol XLIII, No 2, 1964.  
Dept of Inter No  
AS36 US4 24198

Serological Examinations in Immunisation  
Research for the Prevention of Red Fever in  
Pigs, by O. Zak, A. Zuffa, et al, 18 pp.  
Czech, per, Veterinarstvi, Vol XIV, No 4, 1964,  
pp 162-166.  
CFSTI TT-66-10926

On the Purification of Anti-Diphtheria and Antitetanus  
Plasma, by A. J. van Triet, 35 pp.  
DUTCH, rpt, Delft Univ. Doctoral Thesis, 1957, pp 11-41;  
92, 93.  
CFSTI TT-66-10937

Spawning Ground Catalog of the Kvichak  
River System, Bristol Bay, Alaska.  
Compiled by Robert L Demory.  
FRENCH, rpt, 1964, 292 pp.  
Dept of Inter No  
SK 361 A2S7f No 488

First Clinical Report on a G 246,  
by G. Laborit, 21 pp.  
FRENCH, per, Agressologie, Vol VI, 1965,  
pp 505-515.  
CFSTI TT-66-10988

Clinical Applications of the Measurement of  
Aldosterone Secretion by a Method of Double  
Isotope Dilution, by F. Thervet,  
A. Salas, et al.  
FRENCH, per, Annales d Endocrinologie,  
Vol XXVI, No 2, 1965, pp 161-167.  
CFSTI TT-66-10739

Some Aspects of Sensory-System Activity  
in Application to Problems of Space Physiology,  
by V. D. Glezor, V. A. Kislyakov, 29 pp.  
FRENCH, rpt, International Symposium on Basic  
Environmental Problems of Man in Space,  
1965. 9233073  
ABC UCRL-TR-1233

Bariolitos, by C. do P. Valladares, 8 pp.  
FRENCH, per, Revista Brasileira de Gastroen-  
terologia, Vol II, No 6, 1950, pp 595-608.  
CFSTI TT-66-10994

Scientific  
Biological & Medical Sciences (Contd)

Examining and Operating Chair, by Paul Chavanon,  
4 p.  
FRENCH, pat, Patent No 628,965.  
Dept of Comm  
Patent Office

Improved Chairs used in Surgery, by Eduard Jos-  
eph Guyot, 5 p.  
FRENCH, pat, Patent No 631,954.  
Dept of Comm  
Patent Office

Man and Mammoth in Mexico, by  
Helmut, De Terra.  
GERMAN, rpt, 1957, 191 pp.  
Dept of Inter  
No 679.9(300) T27m

A Contribution to the Therapy of Ulcus Cruris  
in Practice, by G. Pfeifer, 5 pp.  
GERMAN, per, Deutsches Medizinisches Journal,  
Vol XVI, No 1, 1965, pp 22-26.  
CFSTI TT-66-10741

Energy Balances of Persons Without  
Physical Activity and Concentrated Rations,  
by Von W. Wirths. 14 pp.  
GERMAN, per, Int. Z. Angew Physiol  
Einschl Arbeitsphysiol, Vol XXI, 1965,  
pp 230-246.  
ACSI J-0106  
ID 2834008866

Report of the RBE Committee to the International  
Commission for Radiation Protection and for  
Radiological Units and Measurements.  
GERMAN, per, Kernenergie, Vol VII, No 10,  
1964, pp 181-203.  
\*FTD-HT-66-438

Hereditary Diabetes in Animal Experiments,  
by W. Schweisheimer, 5 pp.  
GERMAN, per, Medizinische Klinik, Vol LX, No 31,  
1965, pp 1252-1253.  
CFSTI TT-66-11080

Recent Views on the Drug-Receptor Relation. Pt II.  
Conclusion, by W. Haseley, 13 pp.  
GERMAN, per, Schweizerische Medizinische Wochenschr,  
Vol XCV, No 14, 1965, pp 460-466.  
CFSTI TT-66-10740

Scientific  
Biological & Medical Sciences (Contd)

Magnetism and Orientation of European Robin (*Erithacus Rubecula*) in Migratory Unrest, by F. W. Merkel, W. Wiltshko, 9 pp.  
GERMAN, per, die Vogelwarte, Vol XXIII, 1965, pp 71-77.  
CFSTI TT-66-11083

The Effect of Light on the Ketosteroid Excretion, by E. Nallner, M. Keresesi, et al. 11 pp.  
HUNGARIAN, per, Acta Chirurgica (Academiae Scientiarum Hungaricae), Vol 4, No 3, 1963, pp 181-188. 9700959  
FTD-TT-65-1867

Development of Veterinary Internal Medicine over the Past 20 Years in Hungary, by Dr. Prof. Zoltan Horvath, 11 pp.  
HUNGARIAN, per, Magyar Allatorvosok Lapja, No 3, 1966, pp. 97-100.  
JPRS 36193

Progress in the Departments of Anatomy and Histology over the Past Twenty Years, by Dr. Gyula Kovacs and Dr. Gyorgy Feher, 11 pp.  
HUNGARIAN, per, Magyar Allatorvosok Lapja, No 3, 1966, pp. 102-105.  
JPRS 36150

Possibility of Activating the processes of Hepatic Conjugation and Excretion of Bilirubin by means of Some Drugs. Experimental Studies with Nicotinic Acid Diethylamide (Coramine) and Phenylethylbarbituric Acid, by P. Careddu, 9 pp.  
ITALIAN, per, Minerva Medica, Vol LV, No 69, 1964, pp 2539-2562.  
CFSTI TT-66-10856

Use of Radioactive Krypton (<sup>85</sup>Kr) in the Study of Ventilatory Uniformity and Distribution of Perfusion in Separate Lungs. I. Presentation of the Method, by A. Cellorino, R. Catolla Cavalcanti, 26 pp.  
ITALIAN, per, Minerva Nucl, Vol IX, 1965, pp 160-171. 9233077  
AEC NP-TR-1382

Immunizing Activity of the Combined Streptococcus Agalactiae and Staph Aureus Vaccine against Experimental Staphylococcal Infection of Mice, by F. Negretti, 6 pp.  
ITALIAN, per, Societa Italiana delle Scienze Veterinarie, Ann. Vol XVII, 1964, pp 765-768.  
CFSTI TT-66-10923

Scientific  
Biological & Medical Sciences (Contd)

On the Chemical Conversion of Atropine in the Liver; Pharmacological Action of Atropine Oxidized to Aldehyde (atropanal). by K. Matsuda.  
JAPANESE, per, Jap. Journal of Medical Sciences, Vol 13, No 4, 1940, pp 4-5 No.1/2.  
NLL Ref: 3542 1965 (T 114 G)

Radiation Effect on Intestinal Function (I) Studies on Rabbits Intestinal Damage by Abdominal Window Method, by Osamu MATSUOKA, Takehiko TSUCHIYA, et al.  
JAPANESE, per, Nippon Act. Radiol, Vol 24, No 2, May 1964, pp 157-162. 9233268  
AEC NSJ-tr-44

Effects of Gamma-irradiation on Tulip (II) Effects on Various Stages of the Development, by Hisao MATSUBARA, Shozo IBA, et al.  
JAPANESE, rpt, Tokyo Metropolitan Isotope Centre, Ann. Rept, No 2, 1963, pp 157-162. 9233270  
AEC NSJ-tr-53

Research Work Done at Elevated Temperature in an Unventilated Environment, by W. Liberson, P. Marques.  
SPANISH, per, Le Travail Humain, Vol II, 1934, pp 39-69.  
NASA TT F-10,122

Results of First Clinical Trials of CIBA 32,644-ua in the Therapy of Vesical Bilharziasis, by C. R. Lambert, F.S.Da. Cruz Ferreira.  
SWISS, per, Bulletin of World Health Organization, Vol XXXII, No 1, 1965, pp 73-82.  
CFSTI TT-66-10989

Investigations about the Fibre Connections Between Diencephalon and Mesencephalon of the Cat, by V. Bucher, S. Buergi.  
SWISS, per, Confina Neurologica, Vol VI, 1944, 1945, pp 317-340.  
CFSTI TT-66-10863

Enzymatic Determination of Ketone Bodies in Blood, by H. U. Bergmayer, E. Bernt.  
SWISS, per, Enzymologia Biologica et Clinica, Vol V, No 2, 1965, pp 65-76.  
CFSTI TT-66-10884

Scientific  
Biological & Medical Sciences (Contd)

Physical Experiments concerning the Sense of Equilibrium of Man, by E. Mach, 19 pp. SWISS, per, Mathematischnaturwissenschaft Klasse Sitzungsberichte Ak der Wissenschaft, Vol LXVIII, No 8, 1873, pp 124-140. CFSTI TT-61-14722

Tuberculosis Prevention: Vaccination or Chemoprophylaxis, by H. Bloch, 8 pp. SWISS, per, Paediatriche Fortbildungskurse fuer die Praxis, Vol X, 1964, pp 53-62. CFSTI TT-66-10855

Clinical Results of Treatment with Locacorten, by D. Jenny, 14 pp. SWISS, per, Therapeutische Umschau und Medizinische Bibliographie, Vol XXII, No 8, 1965, pp 410-417. CFSTI TT-66-10858

Reflexograph -- A Device for the Study of Human Higher Nervous Activity, by K. O. Shkabar, Ye. A. Rushkevych, V. V. Korneyev, and O. Ya. Mazurenko, 7 pp. UKRAINIAN, per, Fiziologichnyy zhurnal, Vol XII, No 2, Mar-Apr 1966, pp. 269-272. JPRS 36165

Chemistry

Prevention of Sedimentation in Petrochemicals, by G. A. Babalyana, ed. RUSSIAN, bk, Bor'ba s Otlozheniyami Parafina, 1965, 340 pp. NLL R 40234

Study of the Formation of Polybenzimidazoles by V. V. Korshak, et al. RUSSIAN, per, Dokl Akad Nauk SSSR, Vol CXLIX, No 1, 1963, pp 104-106. \*NASA TT F-10,174

Chemical Concentration of Ores, by A. S. Chernyak. RUSSIAN, bk, Khimicheskoe Obogashchenie Rud, 1965, 203 pp. NLL R 40058

Stabilization of Polysiloxanes by Antioxidant Additives, by R.I. Kobrova, G.S. Tubyanskaya, et al. 8 pp. RUSSIAN, per, Khimiya i Tekhnologiya Topliv i Masel, No 9, 1964, pp 53-56. 9700216 FTD-TT-65-1845

Scientific  
Chemistry (Contd)

Some Problems of Heat Calculations for Batch Reactors for the Manufacture of Alkyd Resins, by E. B. Manusov et al. RUSSIAN, per, Lakokrasoch. Material. i Primen., No 1, 1965, pp 56-63. NLL R: 5828.4F 1965 (5806)

Mechanization and Automation in the Glucose Industry, by A. I. Asanov et al. RUSSIAN, bk, Mekhanizatsiya i Avtomatizatsiya v Krakhmalopatochnoi Promyshlennosti, 1965, 184 pp. NLL R 39827

Nature of the MgO and Al<sub>2</sub>O<sub>3</sub> Conductivity, by V. P. Luzgin, et al. RUSSIAN, per, Ogneupory, Vol XXX, No 4, 1965, pp 42-44. NASA TT F-10,093

On Microseismic Sources, by T. A. Proskuryakova. RUSSIAN, per, Rezultaty Issled. po Programme Mez. Geofiz. Goda, Razdel 12, No 6, 1965, pp 23-30. NLL Ref: 6113.199 1965 (88)

Wave Structure of Microseisms, by L. N. Rykunov, V. V. Sedov. RUSSIAN, per, Rezultaty Issled. po Programme Mez. Geofiz. Goda, Razdel 12, No 6, 1965, pp 31-36. NLL Ref: 6113.199 1965 (89)

The Structure of Shock Waves in Air With Account Being Taken of the Kinetics of Chemical Reactions and the Excitation of Molecular Vibrations of Nitrogen, by S. N. Anisimov, N. M. Kuznetsov, et al. RUSSIAN, per, Teoreticheskaia i Prikladnaya Aerodinamika, Vol II, No 3, 1964, pp 337-343. 9700839 Dept of Navy/ONI Tr No 2142

The Effect of Chemical Reactions on Diffusive-Convective Energy Transfer, by V. I. Makaryavichius, M. M. Tamonis. RUSSIAN, per, Tr Akad Nauk Litovsk SSR, Ser B, No 4(43), 1965, pp 153-164. \*Dept of Navy/APL/JHU J-838

Extraction of Metal Compounds From Pyrazoline Dithiocarbamates, by V. N. Byr'ko. RUSSIAN, per, Tr. Komis po Analit Khim, Vol XIV, 1963, pp 191-201. NASA TT F-417

Biological Mechanisms of Oxalic Acid Decarboxylation, by N.K. Magradova. RUSSIAN, per, Tr. Svyaz. Mol., Vol LII, No 1(4), 1961, pp 3-18. \*NASA TT F-10,143

Scientific  
Chemistry (Contd)

Comparative Study of Action of Gamma Rays and Thermal Sterilization on Thiamine, Riboflavin, Nicotinic Acid, and Tocopherol Content in Beef, by Z. M. Syumyakova.

RUSSIAN, per, Voprosy Pitaniya, No 2, 1966, pp 52-55.

\*ACSI J-0303

ID 2204036166

Present State and Prospects for Development of Marine Chemistry, by S. V. Bruyevich, 6 pp. RUSSIAN, per, Works of the Oceanology Institute of the Academy of Sciences of the USSR,

Vol XXVI, 1958, pp 3-7. 9700604

Dept of Navy/ONI Tr No 1010

Experimental Studies on Substituting Hydrochloric Acid Waste For Part of Sulfuric Acid in Producing Calcium Superphosphate, 7 pp.

CHINESE, per, Hua-hsueh Shih-chieh, No 3,

10 Mar 1966, pp. 121-123.

JPRS 36011

Trial Manufacture of Iron (Nickel) Compounded Electrotyping Molds, 6 pp.

CHINESE, per, Hua-hsueh Shih-chieh, No 3,

10 Mar 1966, pp. 124-125.

JPRS 36011

Pressure Pickup for Use in Air, by K. E. Widell, 9 pp.

DANISH, rpt, Tryk Pick-up Til Luft,

December 1962, pp 1-9. 9700746

Dept of Navy/ONI Tr No 2186

Coatings of Polyvinylidene Chloride, by R. Lefaux, Interpack 66.

FRENCH, per, L'Auxiliaire, No 293,

April 1966, pp 15-19; 25-31.

ACSI J-0118

ID 2204031066

A New Method for the Determination of Caprolactam, by L. Polaczek.

GERMAN, per, Chemia Analytica, Vol 8,

1963, pp 961-964.

NLL Ref: 5828 1965 (5804)

On the Autothermal Cracking of Liquid Hydrocarbons, by Von Alfred Schmidt, Herbert Schmidt et al.

GERMAN, per, Erdol und Kohle-Erdgas-Petrochemie, No 9, Sept 1963,

pp 940-944.

\*ACSI J-0317

ID 2204037066

Scientific  
Chemistry (Contd)

Vibration Excitation and Molecular Dissociation of Gaseous Oxygen and Carbon Dioxide Behind the Shock Front, by N. A. Generalov, S. A. Losev.

RUSSIAN, per J. Quant Spectr Radiative Transfer, Vol VI, No 1, 1966, pp 101-115.

\*NASA TT F-10,160

A Quick Process for Nitrogen Micro Estimation in Organic Substances using  $\text{Co}_3\text{O}_4$  as the Combustion Catalyst, by M. Vecera. FRENCH, per, Mikrochimica Acta, Vol II, 1960, pp 208-219.

\*AEC

Protection Against Oxidation of Niobium by Means of a Layer of  $\text{NbSi}_2$

Impregnated With  $\text{SnAl}$ , by B. Lux, et al.

FRENCH, rpt, Paper Presented at the International Conference Organized by the CNRS in Paris, 1966, pp 7-12.

\*NASA TT F-10,183

Contributions to the Physiology of Water and Sodium Chloride, by O. Cohnheim, et al.

GERMAN, per, Z. Physiol Chem, Vol LXIII,

1910, pp 413-431.

NASA TT F-10,131

Physiology of Water and Sodium Chloride, by O. Cohnheim, et al.

GERMAN, per, Z. Physiol Chem, 1912,

Vol LXXVIII, pp 62-88.

NASA TT F-10,146

Alkalimetric Microanalysis of Amino Acids and Peptides, by W. Grassmann, W. Heyde.

GERMAN, per, Z. Physiol Chem, Vol CLXXXIII,

1929, pp 32-38.

NASA TT F-9866

The Critical Supersaturation of Slightly Soluble Salts Homogeneous Precipitation by the Two-Phased Method, by A. Fabrikanos, K. H. Lieser.

GERMAN, per, Z fur Phys Chem, Vol XXXVI,

1963, pp 232-235.

AEC-RFP-tr-15

Chromato-mass-spectrometry. Communication 2. Problems of Combining Chromatographic Columns with a Mass-Spectrometric Detector, by V. L. Tal'rose et al.

GERMAN, per, Zh. Analit. Khim, Vol 20, No 1,

1965, pp 103-111.

NLL Ref: 9022.9 1965 (1114)

Scientific  
Chemistry (Contd)

Hungarian Scientist Reports on His Studies in Nuclear Chemistry at Warsaw University, by Mrs. Danoczy, Richard, 5 pp.  
HUNGARIAN, per, A Magyar Tudományos Akademia Kemiai Tudományok Osztályának Közleményei, Vol 25, No 3, 1966, pp. 310-312.  
JPRS 36026

Hungarian Scientist Reports on Molecular Studies at Moscow State University, by Istvan Hargittai, 5 pp.  
HUNGARIAN, per, A Magyar Tudományos Akademia Kemiai Tudományok Osztályának Közleményei, Vol 25, No 3, 1966, pp. 312-314.  
JPRS 36027

Recent Progress in Radiation Chemistry on Polymers in Japan, by Koichiro HAYASHI.  
JAPANESE, per, J. Atomic Energy Soc. Japan, Vol 5, No 12, Dec 1963, pp 997-1005. 9233272  
AEC NSJ-tr-56

Radiation Induced Copolymerization of Tetra-Fluoroethylene With Vinylchloride at Low Temperature, by Yoneho TABATA, Kumao HAMANOUE, et al.  
JAPANESE, per, J. Chem. Soc. Japan, Ind. Chem. Sect., Vol 67, No 3, May 1964, pp 482-484, 9233269  
AEC NSJ-tr-45

Absolute Measurement of Disintegration Rate of Radioisotope Sources by X-Gamma Ray Coincidence Counting Method, by Tamaki WATANABE, Norio TAKEUCHI.  
JAPANESE, per, Oyo Buturi (Tokyo), Vol 33, No 5, May 1964, pp 322-327. 9233267  
AEC NSJ-tr-43

Production of Unsaturated Hydrocarbons by the Dehydration of Alcohols, by Ohara Soichiro.  
JAPANESE, Patent No Showa 39-30263 (168)  
Dec 25, (4 Jul 1961), 2 pp.  
\*AEC

Scientific  
Earth Sciences & Astronomy

Report of the Investigations in the Field of Gravimetry Conducted in the USSR from 1962-65, by Yu. D. Boulanger, L. P. Pellinen.  
RUSSIAN, rpt, Attach to IR 1502006366  
Dept of Navy Tr 4752/ONI Tr 2191

Mechanization of Development of Frozen Ground, by G. A. Svistunov, 4 pp.  
RUSSIAN, per, Avtomobilnyye Dorogi, Jan 1966, 2 pp.  
ACSI I-9701  
ID 2204026466

Studies of the Motion of Artificial Lunar Satellites, by G. A. Chebotarev and S. N. Kirpichnikov,  
RUSSIAN, rpt, Bulletin of the Institute of Theoretical Astronomy, Vol X, No 2(115), 1965, pp 109-117.  
\*ACIC TC-1082

Telescopic Meteor Stream in the Region of the Celestial Pole, by A. M. Baknarev.  
RUSSIAN, per, byul Vses Astron Geodez Obshch., Vol XXXVII, 1965, pp 29-34.  
RAND

A Linear Theory of the Structure of the Wing Back Clouds in Super Critical Currents, by Wu. Chin-yueh.  
CHINESE, per, Chung-kuo K'o-hsueh Chi-shu Ta-hsueh Hsueh-pao, Vol I, No 1, Feb 1965, pp 102-195.  
\*JPRS/NY-13360

Abyssal Structure of the Earth's Crust According to Seismic Data Under the Black Sea Towards the Southwest of Crimea, by Yu. P. Neprochnov,  
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol CXXV, No 5, 1959, pp 1119-1122.  
ACIC TC-1042

On Determining the Cross-Section of Inelastic Collisions of Molecules of CO<sub>2</sub> with Molecules of Air through Measurements of the Heat Radiation in the Upper Atmosphere, by G. M. Shved.  
RUSSIAN, per, Iz Ak nauk SSSR, Vol I, 1965, pp 1000-1002.  
RAND

Polar Ice and Climate, by M. I. Budyko.  
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Geograf., No 6, 1962, pp 3-10.  
RAND

Scientific  
Earth Sciences & Astronomy (Contd)

Cretaceous Formations of Ferghana Depression, by Lev Borisovich Rukhin. RUSSIAN, rpt, Leningrad Universitet Institut Zemnoi Kory Leningrad 1961, Dept of Inter No 343(690) R858mEe

Method of Calculating Deviations from Kirchhoff's Law in the Mesosphere in the Presence of Radiation Transfer in the 15 mk Carbon Dioxide Band, by G. M. Shved. RUSSIAN, per, Lenin Univ Vest Ser Fiz i Khim, Vol IV, No 1, 1964, pp 67-79. RAND

Single Line Approximation during the Transfer of Radiant Energy in the Upper Atmosphere, by G. M. Shved. RUSSIAN, per, Lenin Univ Vest Ser Fiz i Khim, Vol IV, No 1, 1964, pp 79-81. RAND

Mineralogical-Structural Features of the Saryuk Stony Meteorite, by I. A. Yudin. RUSSIAN, per, Meteoritika, No 14, 1956, pp 101-109. NASA TT F-10,126

Opaque Minerals of Stony Meteorites, by I. A. Yudin. RUSSIAN, per, Meteoritika, No 16, 1958, pp 78-104. NASA TT F-10,127

Regularities in Composition and Structure of Meteorites and Problem of Their Origin, by A. A. Yavnel. RUSSIAN, per, Meteoritika, No 26, 1965, pp 26-34. NASA TT F-10,128

On the Structure of Chondrules and Chondrites, by L. G. Kvascha. RUSSIAN, per, Meteoritika, No 26, 1965, pp 35-57. \*NASA TT F-10,129

Classification of Ferrous Meteorites by Structure, by A. A. Yavnel. RUSSIAN, per, Meteoritika, No 26, 1965, pp 140-145. \*NASA TT F-10,130

The Amount of Summer Lightning Over the European USSR, by N. I. Leushin. 15 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 9, 1964, pp 22-28. 9700955 FTU-TT-65-1798

Scientific  
Earth Science & Astronomy (Contd)

Energy Spectra of Wind Velocity Fluctuations in the Free Atmosphere, by N. Z. Pinus, 13 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 3-11. JPRS 35828

Forecasting the Mean Value of Indices of Atmospheric Circulation for a Natural Synoptic Period, by M. N. Fedulova, 6 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 26-29. JPRS 35828

Systematic Errors in Estimates of the Parameters of River Runoff Computed by the Moments Method, by Ye. G. Blokhinov, 7 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 32-38. JPRS 35828

Interpretation and Meteorological Use of Satellite Information, by I. P. Vetlov, 9 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 41-44. JPRS 35828

Use of Television Observations of Meteorological Satellites in Synoptic Analysis at the Central Institute of Forecasts, by L. S. Minina, 7 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 45-48. JPRS 35828

Review of the Book Elektrichestvo Svobodnoy Atmosfery (Electricity in the Free Atmosphere), by I. M. Imyaninov and Ye. V. Chubarina, Gidrometeoizdat, Leningrad, 1965, by L. G. Kachurin and V. M. Muchnik, 6 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 57-59. JPRS 35828

Literature on Meteorology and Hydrology for 1965, 12 pp. RUSSIAN, per, Meteorologiya i Gidrologiya, No 4, 1966, pp. 59-63. JPRS 35828

Steps Above the Earth (Data on Leonov's "Walk in Space"), by A. Yafim'yev. RUSSIAN, per, Mirovoe Priblizhenie Abkhazetva SSSR, 1965, No 5(77), pp 6-8. \*FTD-TT-66-443

Scientific  
Earth Sciences & Astronomy (Contd)

A Ray Which Penetrates the Future,  
by N. Aleksandrov.  
RUSSIAN, per, Nauchno-Tekhnicheskiye  
Obshchestva SSSR, No 8(68), 1964,  
pp 41-43.  
\*FTD HT-66-439

First Panorama of the Lunar Surface,  
by A. I. Lebedinskiy.  
RUSSIAN, bk, Pervyye Panoramy Lunnoy  
Poverkhnosti, Part I & II, 1966, pp 1-100.  
\*FTD-MT-66-65

A Statistical Estimate of the Accuracy of Av-  
eraging Up the Disturbed Value of the Gravitat-  
ional Acceleration for a Finite Period of Time,  
by Yu. A. Tyazhesti,  
RUSSIAN, per, Prikladnaya Geofizika, No 37, 1963,  
pp 135-146.  
\*ACIC TC-1066

Equations of the Motion of an Earth's Satellite  
Taking into Account Atmospheric Resistance, by  
K. G. Valeyev,  
RUSSIAN, per, Prikladnaya Matematika i Mekhanika,  
Vol XXIX, No 6, 1965, pp 1100-1104.  
ACIC TC-1085

Earth Model of Cosmic Hot-House, by  
M. A. Mil'khikher.  
RUSSIAN, per, Priroda, No 2, Feb 1966,  
pp 102-105.  
\*ACSI J-0302  
ID 2204036066

On the Heat Effect of the 15  $\mu$ m CO<sub>2</sub> Band in  
the Upper Atmosphere, by G. M. Shved.  
RUSSIAN, bk, Problemy Atmosfericheskoi Fiziki  
Sbornik 3, 1965, pp 96-104.  
RAND

On the Computation of Certain Integrals in the  
Theory of Absorption, by V. A. Baryshev.  
RUSSIAN, bk, Problemy Atmosfericheskoi Fiziki,  
Sbornik 3, 1965, pp 145-150.  
RAND

The Time of Vertical Water Transport in  
the Ocean, by K. A. Chekotillo.  
RUSSIAN, per, Rezultaty Issled. po  
Programme Mez. Geofiz. Goda, Razdel 10,  
No 13, 1965, pp 37-40.  
NLL Ref: 6113.199 1965 (90)

Scientific  
Earth Sciences & Astronomy (Contd)

A Bathymetric Chart of the Northwest  
Indian Ocean, by I. M. Belousov.  
RUSSIAN, per, Rezultaty Issled. po  
Programme Mez. Geofiz. Goda, Razdel 10,  
No 13, 1965, pp 163-171.  
NLL Ref: 6113.199 1965 (87)

Studies of the Earth's Figure Without the Use  
of the Normal Field, by I. F. Monin,  
RUSSIAN, per, Sbornik Statey po Geodesii, No 11,  
1960, pp 63-71.  
\*ACIC TC-1078

Undersea Research Vehicles, by  
I. N. Sakhalov, 3 pp.  
RUSSIAN, per, Sudostroyeniye, Aug 1965,  
pp 18-19. 9700744  
Dept of Navy/ONI Tr No 2092

Determination of the Maximal Values of  
the Gravitational Drift and the Drift Due to  
Irregular Rigidity in Integrating Floated-  
Type Gyroscopes, by G. A. Slonyanskiy.  
RUSSIAN, rpt, Tekhnologiya i Konstrukirovaniye  
Giroprilborov, 1964, pp 74-82.  
NASA TT F-10104

Operation of an Integrating Floated-  
Type Gyroscope in the Capacity of an  
Angular-Motion Nonfollow-Up Pickup,  
by G. A. Slonyanskiy.  
RUSSIAN, rpt, Tekhnologiya i Konstrukirovaniye  
Giroprilborov, 1964, pp 83-90.  
NASA TT F-10,105

On the Conditions for the Development  
of Strong Winds in the Arctic,  
by L. A. Dykina.  
RUSSIAN, per, Trudy Arkt. i Antarkt.  
Nauchno-Issledovatel Inst. Vol 255,  
pp 158-168.  
NLL Ref: 9022.551 1965 (341 N)

On the Relation Between Salinity,  
Chlorinity, and Density of the Water  
of the Sea of Azov, by A. P. Tsurikova,  
26 pp.  
RUSSIAN, per, Trudy Gosudarst Okeanograf  
Inst. Vol LII, 1960, pp 28-48. 9700747  
Dept of Navy/ONI Tr No 2187

A Method of Calculating the Temperature of  
the Water in the Active Layer of the White  
Sea, by N. Ya. Arsen'yeva, 27 pp.  
RUSSIAN, per, Trudy Gosudarstvennogo okeano-  
graficheskogo instituta, Vol XXVI, 1965,  
pp. 75-94.  
JPRS 36254

Scientific  
Earth Sciences & Astronomy (Contd)

On Calculating the Vertical Temperature Profile in the Sea, by S. V. Kochetov and K. S. Pomeranets, 12 pp.  
RUSSIAN, per, Trudy Gosudarstvennogo okeanograficheskogo instituta, Vol XXCVI, 1965, pp. 144-152.  
JPRS 36256

Inertial Errors of Electrobathythermographs and Methods of Compensating For Them, by V. G. Volkov.  
RUSSIAN, per, Trudy Instituta Okeanologii, Ak Nauk SSSR, Vol XXXIX, 1960, pp 33-38.  
Dept of Inter No  
GCI E57 No 53

Methods of Quantitative Studies of Deep Water Benthos by G. M. Belyayev, M. P. Sokolova.  
RUSSIAN, per, Trudy Instituta Okeanologii, Vol XXXIX, 1960, pp 96-100.  
Dept of Inter No  
GCI E57 No 52

Principal Characteristics of the Radiation balance of the Underlying Surface and of the Atmosphere in the Arctic, by M. S. Marshunova.  
RUSSIAN, per, Trudy Lenin Arkti i Antarkti Nauch Issled Inst, Vol CCXXIX, 1961, pp 5-53.  
RAND

On the Radiation Properties of Clouds, by A. P. Koptev, A. I. Voskresenskiy.  
RUSSIAN, per, Trudy Lenin Arkti i Antarkti Nauch Issled Inst, Vol CCXXIX, No 2, 1962, pp 39-47.  
RAND

On the Heat balance of the Central Arctic, by U. P. Doronin.  
RUSSIAN, per, Trudy Lenin Arkti i Antarkti Nauch Issled Inst, Vol CCXLII, 1963, pp 178-184.  
RAND

Variability of Solar Radiation in the Arctic, by M. S. Marshunova.  
RUSSIAN, per, Trudy Lenin Arkti i Antarkti Nauch Issled Inst, Vol CCXXIII, 1965, pp 147-156.  
RAND

Search for High-Energy Photons From Discrete Sources of Cosmic Radiation, by A. Ye. Chudakov, et al.  
RUSSIAN, per, Trudy Byurofizicheskogo Inst Akad Nauk SSSR, Sibirsk Otd, 1965, pp 46-49.  
\*NASA TT F-10,190

Scientific  
Earth Sciences & Astronomy (Contd)

On the Question of Determining Normal Heights, by V. F. Yeremeyev,  
RUSSIAN, per, Trudy Tsentral'nogo Nauchno-Issledovatel'skogo Instituta Geodesii, Aerost'yenki, i Kartografii, No 157, 1965, pp 69-84.  
ACIC TC-1046

Sixth Continental Expedition 1960-1962; General Description and Preliminary Scientific Results, 46 pp.  
RUSSIAN, per, Trudy Sovetskoy Antarkticheskoy Ekspeditsii, Vol XLIII, 1965, pp. 58-91.  
JPRS 35903

Determination the Figure of the Earth Without the Earth Without the Use fo the Concept of a Normal Comparison Planet, by S. V. Gromov,  
RUSSIAN, per, Vestnik Leningradskogo Universiteta. Series of Mathematics, Mechanics and Astronomy, No 19, 1957, pp 145-152.  
\*ACIC TC-1077

Radiative Heat Transfer Near the Stagnation Point of a Blunt Body, by Z. S. Galanova.  
RUSSIAN, per, Vestn Leningr Univ Ser Matem Mekh i Astron, No 1, Issue1, 1966, pp 120-130.  
NASA TT F-10,087

Research in the Ocean 33rd Trip of Vityaz, by O. A. Kuznetsov, 4 pp.  
RUSSIAN, per, Works of the Institute on Oceanology, Vol LXIV, 1964, pp 154-157.  
9700617  
Dept of Navy/ONI Tr No 1034

The Riddle of Ball Lightning, by Roal'd Aleksandrovich Leonov,  
RUSSIAN, bk, Zagadka Sharovoy Molnii, Moscow, 1965, pp 2-75.  
\*JPRS/NY 13328

The Earth's Crust and the Upper Mantle of the Continents, by V. V. Belousev,  
RUSSIAN, bk, Zemnaya Koru i Verkhayaya Mantiya Materikov, Moscow, 1966, pp 5-111.  
\*JPRS/DC-12519

Formation and Destruction of Thermal Wind in a Simple Baroclinic Atmosphere, by C. Chu'Shih.  
CHINESE, per, Ch'i-Hsiang Hsueh-Pao, Vol 33, No 1, 1963, pp 51-63.  
NII Ref: 7773.723 1965 (EJN 65-22)

Scientific  
Earth Sciences & Astronomy (Contd)

A Dynamical Model for the Numerical Prediction of Baroclinic Flows, by C. Tseng-Hao.  
CHINESE, per, Ch'i-Hsiang Hsueh-Pao, Vol 33, No 2, 1963, pp 131-144.  
NLL Ref: 7773-723 1965 (ENM 65-23)

Formation and Destruction of Thermal Wind in a Simple Baroclinic Atmosphere, by C. Chu-Shih.  
CHINESE, per, Ch'i-Hsiang Hsueh-Pao, Vol 33, No 2, 1963, pp 153-162.  
NLL Ref: 7773.723 1965 (ENM 65-22)

Evolution of Individual Cumulus, by C. Jui-Yung.  
CHINESE, per, Ch'i-Hsiang Hsueh-Pao, Vol 33, No 2, 1963, pp 257-270.  
NLL Ref: 7773.723 1965 (ENM 65-1)

Spectrum Analysis of Large Scale Atmospheric Movement at 100 Millibars during the Period from Jan 1, 1962 to Feb 10, 1962, by Ch'en Shou-chun.  
CHINESE, per, Ch'i Hsiang Hsueh Pao, Vol XXXIII, No 3, 1963, pp 333-338.  
\*FTD-HT-66-437

Utilizing Translational Balloon to Detect Vertical Disturbance in the Atmosphere in Clear Sky over Peiping, by Yen K'ai-wei, Yu Lai-kuang, Ching Jung-lin and Li Kuo-chieh, 17 pp.  
CHINESE, per, Ch'i-hsiang Hsueh-pao, Vol 35, No 4, Nov 1965, pp. 449-459.  
JPRS 36020

Discussion about the Term "Permian-Carboniferous", by Chao I-yang, 8 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 328-331.  
JPRS 36151

Mineralogical Study of the Carboniferous Bauxite from Tsu-Po Basin, Shantung, by Liu Ch'ang-ling, 23 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Jul 1958, pp. 251-260.  
JPRS 36151

Formation of the T'ao-Lin Lead-Zinc Deposit of Fissure Filling Type, by Wang Yu-min, 18 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Jul 1958, pp. 261-268.  
JPRS 36151

Scientific  
Earth Sciences & Astronomy (Contd)

On the Geological Characteristics of the Fukien-Chekiang Area, by Chang Liang-shou, 11 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Jul 1958, pp. 290-294.  
JPRS 36151

A Statistical Study of the Relationship Between Solar Flares and Magnetic Storms, by J. Bai-Qin.  
CHINESE, per, Ti-Ch'iu Wu-Li Hsueh-Pao, Vol 9, No 1, 1960, pp 38-46.  
NLL Ref: 7773.723 1965 (ENM 65-9)

The Applications of Rayleigh and Love Surface Wave Velocities to Determine the Thickness of China's Earth Crust, by SUNG Chungo-ho and T'An Cheng-yeh,  
CHINESE, per, Ti Chiu Wu Li Hsueh-pao, Vol XIV, No 1, 1965, pp 33-44.  
ACIC TC-993

On the Weiho Graben,  
CHINESE, per, Wang Ts'un Ch'eng, Ti Chi Hsueh-pao, Vol XLV, No 2, May 1965, pp 153-164.  
ACIC TC-1029

Observation Results of the Finnish Triangulations in 1961 and 1962, by Erkki Hytonen,  
FINNISH, rpt, Suomen Geodettisenlaitoksen, No 58, 1963, pp 3-34.  
\*ACIC TC-1065

On the Determination of the Mineral Form of Calcium Carbonate in Living Organisms, by T. Joyner.  
FRENCH, per, Annales de l'Institut Océanographique, Vol XXVI, No 1, 113p. 1961.  
Dept of Inter No  
SK361 A278 No 36

Astronomical Observations in the Field Determinations,  
FRENCH, rpt, Astronomiques en Campagne.  
\*ACSI J-0331  
ID 2204037566

Gravimetric and Magnetic Measurements in the Ivory Coast, Upper Volta, and Southern Mali, by J. Reichenmann,  
FRENCH, rpt, Cahiers ORSTOM - Géophysique, No 5, May 1965, 43 pp.  
\*ACIC TC-1069

Scientific  
Earth Sciences & Astronomy (Contd)

On the Determination of the Figure of the Geoid From the Anomalies of the Horizontal Gradient of Terrestrial Gravity,  
FRENCH, per, Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, Vol XVI, No 1, 1937, pp 49-50.  
ACIC TC-1048

On the Determination of the Deflection of the Vertical From the Anomalies in the Horizontal Gradient of Gravity,  
FRENCH, per, Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, Vol XVI, No 3, 1937, pp 169-171.  
ACIC TC-1049

Properties of the Attenuation of Radiowaves in the 0.86 Band by Rain, by S. Godard.  
FRENCH, per, Journal de Recherches Atmospheriques, Vol II, No 4, 1965, pp 121-167.  
\*Dept of Navy/APL/JHU J-840

Application of the Differential Process in the Tide Wave Computation in the Streams Affected by Tides, by Ernst Schmoor.  
GERMAN, per, Der Bauingenieur, Bd34, Heft 6, 1959, pp 231-240.  
Dept of Inter No  
532 qSch58a

Some General Problems Concerning the Tectonics of Old Platforms Illustrated by the Example of the East European Platform, by A. A. Bogdanov,  
GERMAN, per, Geologie, Vol XIV, No 9, Nov 1965, pp 1017-1038.  
ACIC TC-1035

Determining the Figure of Geoid of the Unregulated Earth, by N. Moiseyev,  
GERMAN, per, Gerlands Beitrage zur Geophysik, Vol XLII, No 2/3, 1954, pp 279-290.  
\*ACIC TC-1050

The Soft X-Radiation on the Sun's Undisturbed Corona, by Gerhard Elwert,  
41 pp.  
GERMAN, per, Zeit fur Natur 9A, 1964, pp 637-663.  
Dept of Navy Tr 4736/ONI Tr 2190

Scientific  
Earth Sciences & Astronomy (Contd)

Tests to Determine the total Surface on Soils, Clays and Related Substances. VI. The Influence of Sodium Carbonate Admixtures on the Waterholding Capacity of Hydrogen-clay, by H. Kuron, 14 pp.  
GERMAN, per, Z fur Pflanzenernahrung, Dungung, Bodenkunde, Nol XXXIIIA, No 5, 6, 1934, pp 298-305.  
OTS TT-60-16692

On the Definition of Normal Gravity, by G. Silva,  
ITALIAN, per, Atti della Reale Accademia Nazionale dei Lincei, Vol VIII, 1928, pp 691-696.  
ACIC TC-1071

On the Formula for Normal Gravity, by G. Silva,  
ITALIAN, per, Atti della Reale Accademia Nazionale dei Lincei, Vol XI, 1930, pp 641-644.  
ACIC TC-1072

The Icebreaker Fuji, by R. Owaki.  
JAPANESE, np, Polar News No 1, (Kyokuchi), August 1965, pp 20; 26; 28; 42.  
Dept of Navy Tr 4757/ONI Tr 2195

Electronics

State of Cesium Impurities Utilized in Thermionic Converters, by V. I. Subbotin,  
M. N. Ivanovskiy, et al.  
RUSSIAN, rpt, Report FEI-22 1965, 6 pp.  
\*ABC

Use of Orthogonal Filters for the Optimization and Study of Statistical Properties of Errors in Adaptive Systems,  
by V. V. Solodovnikova.  
RUSSIAN, bk, Analiticheskie Summastravayushchiesya Sistemy Avtomaticheskogo Upravleniya, Moskva, 1965, pp 221-232.  
\*FID-MI-66-67

On Cognition of Speech Sounds With the Air of Self-Organizing Systems With Two Positive Feedbacks, by G. L. Otkhmezuri. 21 pp.  
RUSSIAN, per, Avtomatika, Vol 9, No 2, 1964, pp 59-70. 9700566  
FID-TT-65-1851

Scientific  
Electronics (Contd)

An Assessment of the Intrinsic Safety of Inductive Electrical Circuits With Ferro-Magnetic Cores, by A. I. Sultanovich. RUSSIAN, per, Bezop. Truda v Promyshl, Vol 9, No 9, 1965, pp 40-42. NLL Ref: 8313.4 B 1965 (5212)

Time-Development of a Thermal Explosion by E. I. Vitkin. RUSSIAN, per, Doklady Ak Nauk Belorussk SSR, Vol IX, No 12, 1965, pp 794-797. \*Dept of Navy APL/JHU No J-832

Changes in the Internal Air Distribution of Certain Slow-Running Electrical Machines Resulting from Thermal and Ventilation Tests, by L. S. Rodstein et al. RUSSIAN, per, Elektrichestvo, No 6, 1965, pp 81-84. NLL Ref: 3774.5 1965 (1337)

On the Magnetotelluric Method of Investigation of the Upper Portion of The Earth's Crust, by N. P. Vladimirov, 5 pp. RUSSIAN, rpt, Electromagnetic Probing and Magnetotelluric Methods of Prospecting, April 1961, pp 118-123. 1963. 9700641 Dept of Navy/ONI Tr No 1000a

Microvariation Magnetic Station With a Passband From 0.003 to 10 cps. by Yu. M. Egorov, 8 pp. RUSSIAN, rpt, Electromagnetic Probing and Magnetotelluric Methods of Prospecting, April 1961, pp 157-164, 1963. 9700639 Dept of Navy/ONI Tr No 1000-b

Electron-Beam Apparatus, by A. A. Zhigarev. RUSSIAN, bk, Elektronnoluchevye Pribory, 1965, 336 pp. NLL R 38986

Exposing Defects in the Insulation of Electrical Machines by means of Defectoscopes, by V. B. Kulakovskiy. RUSSIAN, per, Elektr. Stants, Vol 36, No 5, 1965, pp 51-53. NLL Ref: 3774.5 1965 (1299)

Electron Telescopes, by P. B. Shcheglov. RUSSIAN, rpt, Elektronnaya Teleskopiya, Dept of Navy/Tr No 4734/ONI Tr 2176

Scientific  
Electronics (Contd)

Radio - Electronic Automation for Shipping, by V. V. Krachino. RUSSIAN, bk, Elektro-radio-Avtomatika na Morskoy Flote, 1965, 218 pp. NLL R 39786

On Methods of Measuring VH AC Test Voltages, by J. Kucera. RUSSIAN, per, Elektrotechn. Obzor, Vol 54, No 4, 1965, pp 155-159. NLL Ref: 3774.5 1965 (1319)

Some New Possibilities for Increasing the Transmission Rate of Discrete Information, by M. J. Pelekhatyy, 13 pp. RUSSIAN, per, Elektrosvyaz', No 3, Mar 1966, pp. 33-41. JPRS 36028

Steady-State Regimes in Linear and Nonlinear Circuits, by I. Ye. Sredniy, 154 pp. RUSSIAN, bk, Impul'snyy Analiz, Kiev, 1963, 168 pp. 9700695-V FTD-TT-65-1556

USSR Direct Current Research Reports of The Leningrad Direct Current Research Institute. RUSSIAN, bk, Iz Nauchno-Issledovatel'skii Institut Postolannogo Toka, Vol I, 1957, 287 pp. Dept of Inter TK 3111 L5

The Design of one Class of Servo Systems Close to the Optimal, by A.A. Vavilov, F.F. Kotchenko. 19 pp. RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Elektromekhanika, No 8, 1963, pp 961-972. 9700935 FTD-MT-64-305

Economical Binary-Decimal Code Diode Converters, by V. V. Obratov. RUSSIAN, per, Iz VUZ Elektromekh, No 5, 1965, pp 586-589. RAND

Experimental Observation of Fluctuations of the Temperature of Atmospheric Radio Emission, by V.P. Lastochkin, K. S. Stankevich. 4 pp. RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Radiofizika, Vol 7, No 4, 1964, pp 789-790. 9700948 FTD-TT-65-1468

**Scientific  
Electronics (Contd)**

Direction-Finding Characteristics of Monopulse Automatic Tracking Systems by S. A. Vakin, B. Kh. Krivitskiy, et al. RUSSIAN, per, Iz VUZ Radiotekhnika, Vol VIII, No 5, 1965, pp 550-560. \*Dept of Navy APL/JHU No J-833

Common Problems of the Development of Laser Technique and Ultrahigh-Frequency Techniques, by I. V. Lebedev, 8pp. RUSSIAN, per, Iz VUZ Radiotekhnika, Vol VIII, No 6, 1965, pp 625-631. ACSI I-9784 ID 2204006566

Materials Used in Radio Electronics, by A. G. Sobolevskiy. 51 pp. RUSSIAN, bk, Materialy V Radioelektronike, 1963, pp 1-48. 9700932 FTD-MT-65-69

Mechanization and Automation of Winding Operations in Electrical Instrument Making, by P. P. Serebrenitskii, V. N. Chokhov. RUSSIAN, bk, Mekhanizatsiya i Avtomatizatsiya Namotnykh Rabot v Elektropriborostroeni, 1965, 142 pp. NLL R 39748

Networks: Theory and Methods of Calculation, by G. T. Adoms. RUSSIAN, bk, Magopolysnik: Teoriya i Metody Rascheta, 1965, 467 pp. NLL R 39307

Accuracy in Determining the Vertical Component of the Geomagnetic Field for an Electromagnetic Current Measuring Instrument, by V. V. Novykh, 18pp. RUSSIAN, per, Okeanologiya, Vol V, No 4, 1965, pp 718-724. Dept of Navy Tr No 4733/ONI Tr 2094

The Transmission of Discrete Information in Phased Keyed Channels, by N. T. Petrovich. RUSSIAN, bk, Peredacha Diskretnoy Informatsii v Kanalakh s Fasovoy Manipulyatsiyey, Moscow, 1965, pp 1-265. \*JPNS/DC-R-7200/4

Miniature Semiconductor Pressure Sensor, by L. A. Gaispovich, I. I. Sayalov. RUSSIAN, per, Priborostroyeniye, No 10, 1965, pp 24-25. \*FTD-MT-66-316

**Scientific  
Electronics (Contd)**

Use of Lasers in Communication, by B. B. Kobzev et al. RUSSIAN, bk, Primenenie Opticheskikh Kvantovykh Generatorov dlya Tseloi Svyazi, 1965, 120 p. NLL R 39722

Designing of Magnetic Devices for Electron Computers, by E. P. Balashov. RUSSIAN, bk, Proektirovaniye Magnitnykh Elementov i Ustroystv Elektronnykh Bydhis-litel'nykh Mashin, Leningrad, 1964, 290 pp. \*FTD-MT-66-71

Modern Methods of Radionavigation, by O. V. Belavin, M. V. Zerova. RUSSIAN, bk, Sovremennyye Sredstva Radionavigatsii, 1965, 279 pp. NLL R 40204

Determination of Propagation of Short-wave Signals by the Characteristic Distortions at the Point of Reception, by N.A. Tel'pukhovskiy. 16 pp. RUSSIAN, per, Trudy AN SSSR, 15-y Astrometri-cheskoy Konferentsii SSSR, Glavnaya Astronomi-cheskaya Observatoriya (Pulkovo), 1963, pp 365-373. 9700931 FTD-MT-65-166

Certain Questions of the Theory of Detection of Single Pulses, by V.F. Nesteruk, N.N. Porfiryeva. 15 pp. RUSSIAN, per, Trudy Leningradskogo Korablenstroitel'nogo Instituta Sudostroyeniya i Sudovoye Mashinostroyeniye, No 36, 1962, pp 121-133. 9700934 FTD-MT-65-62

Transistorized Analog Computer MEDA 40T by Bohumil Mirtas. CZECH, per, Sdelovaci Technika, No 2, 1965, pp 57-60. \*ACSI J-0325 ID 2204037166

Cable Factories Prepare to Meet Cable Needs for the Power that Will Be Transmitted from the High Dam, 5 pp. ARABIC, np, Al-Ahram, No 28993, 28 Apr 1966, p. 3. JPNS 36135

Semiconductor Electrode System, e. g. Crystal Diode or Transistor, by M. V. Philips, 4 p. FRENCH, pat, Patent No 1,179,196. Dept of Comm Patent Office

Scientific  
Electronics (Contd)

Single Crystal Semiconductor Rectifiers of Medium and High Power, by E. Dura, 21 pp.  
GERMAN, per, Elektrie, Nos. 4 & 5, 1966, pp. 148-149 and 181-185.  
JPRS 36178

Electron and Photon Cascades in Lead Due to 6 Gev Primaries, by U. Volkel, 16 pp.  
GERMAN, rpt Elektron-Photon-Kaskaden in Blei fur Primarteilchen der Energie 6 Gev, 1965. 9233079  
AEC SLAC-TR-41

Group Antennas - Design and Use, by E. Spindler, 12 pp.  
GERMAN, per, Radio und Fernsehen, No 3, Feb 1966, pp 72-76.  
ACSI J-0117  
ID 2204030966

Development Trends in Cathode Ray Technology, by M. von Ardenne, 30 pp.  
GERMAN, per, Die Technik, Vol 21, No 4, Apr 1966, pp. 257-263; No 5, May 1966, pp. 307-313.  
JPRS 36263

Method and Device for Starting Electric Motors, by A. G. Brown, 2 p.  
ITALIAN, pat, Patent No 286,336.  
Dept of Comm  
Patent Office

Thin Film Capacitors in Microelectronics, by Andrzej Wolkenberg.  
POLISH, per, Pomiar Automatyka Kontrola, No 8, 1965, pp 358-359.  
\*FTD-WT-66-444

A New Method for Determining Cable Defects Using Pulse Techniques, by Ing. Eneea Barbu.  
ROMANIAN, per, Telecomunicatii, Vol IX, No 10, Oct 1965, pp 410-414.  
\*ACSI J-0186  
ID 2204033266

New Long-Wave Broadcast Transmitter at Bod, by Cesar Borescu, 11 pp.  
ROMANIAN, per, Telecomunicatii, Vol 10, No 1, Jan 1966, pp. 3-8.  
JPRS 36207

The Radiating System of the Planned High Power Long Wave Broadcast Transmission, by Ernest Kornis, 14 pp.  
ROMANIAN, per, Telecomunicatii, Vol 10, No 1, Jan 1966, pp. 9-14.  
JPRS 36207

Scientific  
Engineering

Collected Works of K. E. Tsiolkovskiy, Vol III. Dirigibles, by A. A. Blagonravov.  
RUSSIAN, bk, Izdatel'stvo Akademii Nauk SSSR Moscow, 1959.  
NLL Ref: 6015.49F 1965 (F-238)

Automation of Oxygen Production Plants, by E. I. Mikhailov, V. N. Tonkin.  
RUSSIAN, bk, Avtomatizatsiya Kislородnykh Stantsii, 1965, 184 pp.  
NLL R 33956

Automated Electric Drives for Machines in Synthetic Fibre Factories, by Ya. V. Mil'man, V. G. Leshchenko.  
RUSSIAN, bk, Avtomatizirovannyi Elektroprivod Mashin Zavodov Sinteticheskogo Volokna, 1965, 196 pp.  
NLL R 39603

Numerical Methods in Gas Dynamics, by G. S. Rosiyakov, L. A. Chukov.  
RUSSIAN, bk, Chislennyye Metody v Gazovoi Dinamike, 1963. 9231457-V  
CFSTI TT 65-50138  
NASA TT F-360

On the Construction of a Mathematical Model of a "Biological Clock" by B. S. Moshkov, et al.  
RUSSIAN, per, Dokl Ak Nauk SSSR, Vol CLXVII, No 2, 1966, pp 448-449.  
NASA TT F-10,107

A Method of Designing a Universal Rotor for a Two-Speed Reversible Motor, by S. Charvat.  
RUSSIAN, per, Elektrotechn. Obozr, Vol 54, No 8, 1965, pp 371-374.  
NLL Ref: 3774.5 1965 (1352)

On Choosing Methods for the Dimensioning of Water-Turbines, by D. Pavel.  
RUSSIAN, per, Energetika, No 7, 1964, pp 301-310.  
NLL Ref: 3774.5 1966 (1307)

Explosion Energy and Charge Design, by M. V. Mal'nikov and L. N. Marchenko, 128 pp.  
RUSSIAN, bk, Energia Vozvra i Konstruktsiya Zaryada, 1964, pp. 3-138.  
JPRS 35928

**Scientific  
Engineering (Contd)**

Classification of Products and Their Components and Technical Documentation of the Basic Production of Turbine Construction Works, by P. F. Yerebin, B. A. Pogodin. RUSSIAN, per, Energomashinostroyeniye, No 12, 1964, pp 27-31.  
NLL Ref: 3774.5 1965 (1317)

The Effect of Design and Operational Factors upon the Efficiency of Turbine Thrust Bearings, Methods of Supervising their Operation and of Protecting Them from Breakdown Damage, by S. L. Yampol'skiy. RUSSIAN, per, Energomashinostroyeniye, Vol 11, No 7, 1965, pp 17-21.  
NLL Ref: 3774.5 1965 (1354)

Hydraulic, Technical and Economic Calculations for Canals, by A. A. Uginchus. RUSSIAN, bk, Gidravlicheskie i Tekhniko-Ekonomicheskie Raschety Kanalov, 1965, 274 pp.  
NLL R 40088

Hydrodynamic Characteristics of Valves and Pipeline Components, Convergencies, Divergencies and Valves, by B. I. Yan'shin. RUSSIAN, bk, Gidrodinamicheskie Kharakteristiki Zavorov i Elementov Truboprovodov, Confuzory, Diffuzory i Zavorov, 1965, 260 pp.  
NLL R 40178

Galloping of Landing Gear Trolleys During the Movement of the Aircraft Over a Dirt Airfield, by V. S. Godek. 6 pp. RUSSIAN, per, Inzhenernyy Zhurnal, Vol 5, No 4, pp 743-745. 5700564  
FTD-HT-66-223

Investigation of the Heating of Solids by Convective and Radiant Flows, by V. V. Ivanov, A. V. Furman. RUSSIAN, per, Izv Ak Nauk SSSR, Energetika i Transport, No 1, 1964, pp 131-134.  
\*Dept of Navy/APL/RNU No 836

Effect of surface Curvature on the Characteristics of Turbulent boundary Layer (USSR), by A. S. Ginevskiy, Ye. Ye. Solodkin. RUSSIAN, per, Izv Ak Nauk SSSR, OTN, Mekh i Mashino, No 1, 1963, pp 99-110.  
\*FTD-HT-66-430

**Scientific  
Engineering (Contd)**

Effect of the Boundaries of an Incompressible Fluid Flow on the Unsteady Aerodynamic Characteristics of a Profile, by D. N. Gorelov. RUSSIAN, per, Izv Akad Nauk SSSR Mekh, No 5, 1965, pp 157-159.  
NASA TT F-10,112

Friction and Windage Losses in Rotor Blade Assemblies of Radial-Flow Turbines of Helicopter and Transport Gas Turbine Power Plants, by N. F. Galitskiy, RUSSIAN, per, Izv VUZ Ser Aviats Tekhn, Vol VII, No 4, 1964, pp 60-66.  
NASA TT F-10,118

The Problem of Stereopanoramic Photography, by M. M. Rusinov, 7 pp. RUSSIAN, per, Izvestiya vysshikh uchebnykh zavedeniy - Geodeziya i aerofotos'yemka, No 2, Mar-Apr 1965, pp. 123-127.  
JPRS 36194

Open-Cast Mine Conveyors, by A. O. Spivakovskii, et al. RUSSIAN, bk, Kar'ernyi Konveiernyi Transport, 1965, 344 pp.  
NLL R 40389

Refrigeration Engineering, Encyclopedic Manual No 2, Refrigeration in Industry and Transport by Sh. N. Kobulashvili, 259 pp. RUSSIAN, rpt, Kholodil'naya Tekhnika, Entsiklopedicheskiy Spravochnik, No 2, Primeneniye Kholoda v Promyshlennosti i na Transporte, Vol II, 1961, pp 5-27; 40-79; 115-139; 153-164; 201-203; 238-252; 306-308; 340-349; 365-368; 386-396; 555-564; 571-575.  
ACSI 1-9484  
ID 2218030564

Automatic Machines for Forging and Stamping, by G. A. Navrotskyi. RUSSIAN, bk, Kuznechno-Shtampovaya Avtomaty, 1965, 424 pp.  
NLL R 39821

Mechanization of Cold Forging in Universal Continuously Reciprocating Presses, by F. V. Nosin. RUSSIAN, bk, Mekhanizatsiya Kholodnoi Shtampakh, 1965, 199 p.  
NLL R 40069

Scientific  
Engineering (Contd)

Mechanization of Loading and Unloading Refrigeration Plants, by M. I. Gural'nik. RUSSIAN, bk, Mekhanizatsiya Pogruzochno-Razgruzochnykh Rabot na Kholodil'nikakh, 1965, 140 pp. NLL R 40055

Mechanization of Auxiliary Processes in Mine Construction, by A. P. Alimov et al. RUSSIAN, bk, Mekhanizatsiya Vspomogatel'nykh Protssessov v Shakhtnom Stroitel'stve, 1965, 179pp. NLL R 39749

The Use of Polyamides in the Supports of Ships' Propeller Shafts, by Ya. Belakovskiy, V. Buskov, et al, 5 pp. RUSSIAN, per, Morskoy Flot, No VI, 1965, pp 31-32. 9700930  
Dept of Navy/ONI Tr No 2000

Certain Data on Investigation of Thermoemission Converter Performance with Auxiliary Ionization, by Yu. Ya. Kravchenko, G. A. Stolyarov. RUSSIAN, rpt, Nekotorye Dannye po Issledovaniyu Raboty Termoemissionnogo Preobrazovatelya s Dopolnitel'noi Ionizatsiei. Report IAE-950, 6 pp. \*AEC

New Trends in Welding Techniques, by B. E. Patona. RUSSIAN, bk, Novye Problemy Svarochnoi Tekhnika, 1964, 478 pp. NLL R 36162

Organization of Machinery Replacement Without Stopping Production, by I. N. Kartashov. RUSSIAN, bk, Organizatsiya Perakhoda na Novye Modeli Mashin Bez Prekrashcheniya Vyrushki, 1965, 240 pp. NLL R 39575

Increasing the Effectiveness of Heat-Engineering Equipment, by A. A. Voznesenskiy. RUSSIAN, bk, Povyshenie Effektivnosti Ustanovok Promyshlennoi Teplo tekhniki, 1965, 343 pp. NLL R 39825

Strength Calculation of Hydraulic-Turbine Components, by A. Ya. Aronson. RUSSIAN, bk, Raschet na Prochnost' Detalei Gidroturbin, 1965, 302 pp. NLL R 39781

Scientific  
Engineering (Contd)

Building Production the Technology and Mechanization of Building Production: The Economics and Organization of Construction, RUSSIAN, bk, Stroitel'noe Proizvodstvo, 1965, 180 pp. NLL R 38305

Construction and Road Building. RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 3, 1963, Entire Issue  
Except pages 8-14; 25-27; 39-40.  
\*ACSI J-0128  
ID 2204030666

Once More About the External Combustion Engine, by G. Smirnov, 10 pp. RUSSIAN, per, Tekhnika Molodezhi, No 1, 1966, pp 34-37. ACSI J-0057  
ID 2204029766

The Influence of Creep on the Stress in thin Laminated Shells, by Y. G. Skomarovskiy. RUSSIAN, bk, Teoriya Obolochek i Plastin, 1964, pp 877-883. NLL RTS 2987

Thermal Design of Maritime Steam Turbines, by V. A. Semka. RUSSIAN, bk, Teplovoi Raschet Sudovykh Paroturbinnykh Ustanovok, 1965, 260 pp. NLL R 40179

Hydraulic Drive of a Winding Engine and its Dynamics, by J. Kopavsek. RUSSIAN, per, Strojrenstv, Vol 15, No 1, 1965, pp 3-12. NLL Ref: 6075.461 1965 (1664)

Electric Heating Devices for Ships, by V. Z. Gurevich, N. A. Demidov. RUSSIAN, bk, Sudovye Elektronagrevatel'nye Ustroistva, 1965, 244 p. NLL R 39944

Ultrasonic Unit Model OKB-3195 for the Cleaning of Separators and Ring Rails, by G. D. Lubyanskiy. RUSSIAN, per, Tekst. Prom., No 1, 1965, pp 66-70. NLL Ref: 5828.4 1965 (5797)

Experimental Study of Supersonic Flow in Turbine Cascades by E. V. Maiorskii, B. M. Troyanovskiy. RUSSIAN, per, Teploenergetika, No 12, 1965, pp 69-72. \*Dept of Navy/APL/RN J-839

Scientific  
Engineering (Contd)

Stability of Systems Possessing Properties of Creep, by A. R. Rzhantsyn. 19 pp.  
RUSSIAN, per, Trudy AN SSSR. Polzuchest' i Dlitel'naya Prochnost' Sibirskoye Otdeleniye Institut Gidrodinamiki, 1963, pp 15-28.  
9700939

FTD-MT-65-171

Choice of Parameters for Design Calculations of Low Head Axial Hydroturbines, by A. E. Shusko.  
RUSSIAN, per, Trudy Laboratorii Gidravlicheskih, No 11, 1964, pp 116-128.  
NLL RTS 2954

The Problem of Assessing the Accuracy of the Calculation of Welding Deformations, by V. I. Vasilev.  
RUSSIAN, per, Trudy Leningrad Inst. ta Vodnogo Transp. Vol 38, 1962, pp 15-.  
NLL Ref: 9022.065 1965 (2192)

Study of the Jerk of the Tow Line on Models of High-Powered Tugs, by Ya. I. Voitekunskiy, et al.  
RUSSIAN, per, Trudy Leningrad Inst. Vodnogo Transp. No 43, 1964, pp 27-.  
NLL Ref: 9022.065 1965 (2211)

Balancing Machines and Instruments, by V. A. Shchepetil'nikov, ed.  
RUSSIAN, bk, Uravnoveshivanie Mashin i Priborov, 1965, 571 pp.  
NLL R 39928

Strengthening Ferroconcrete Structures of Industrial Buildings and Installations, by N. M. Onufriev.  
RUSSIAN, bk, Usilenie Zhelezobetonnykh Konstruktsii Promyshlennykh Zdani i Sooruzhenii, 1965, 342 pp.  
NLL R39921

Future Development of Piston and Combined Internal Combustion Engines, by A. S. Orlin, D. N. Vyubov.  
RUSSIAN, per, Vestnik Mashinostroyeniya, No 4, 1965, pp 3-8.  
\*ACSI J-0305  
ID 2204036366

On Thermal Fatigue, by N. D. Sobolev. 14 pp.  
RUSSIAN, bk, Voprosy Mekhanicheskoy Ustalosti. Tsentral'noye Pravleniye Nauchno-Tekhnicheskogo Obshchestva Mashinostroitel'noy Promyshlennosti, Moskva, 1964, pp 211-219. 9700960  
FTD-TT-65-1697

Scientific  
Engineering (Contd)

Three-Body Problem. Complete System of Angular Functions, by Yu. A. Simonov.  
RUSSIAN, bk, Zadacha Trekh Tel. Polnaya Sistema Uglovykh Funktsii, Moscow, 1965, No 384, 20 pp.  
\*AEC

Approximate Yield Conditions for Rotational Shells Under Axisymmetric Loading, by Chuh Sheng Nien. 28 pp.  
CHINESE, per, Acta Mechanica Sinica, Vol 7, No 1, Mar 1964, pp 12-28. 9700962  
FTD-TT-65-1745

On the Manoeuvrability of Catamarans, by Sheng Tsu-Yin.  
CHINESE, per, Chinese Journal of Ship-Building, No 4, 1964, pp 7-.  
NLL Ref: 9022.065 1965 (2186)

Some New Methods of Constructing Supports of Road Bridges, by Lumir Borovicka  
CZECH, per, Inzenyrské Stavby, May 1965, pp 205-212.  
\*ACSI J-0101  
ID 2204030766

Simplified Method of Calculation of Subterranean Protective Constructions, by O. F. Hastrup.  
DANISH, rpt, En Simplificeret Metode Til Dimensionering af Underjordiske Dækningsrum, March 1964, Cover to Cover.  
Dept of Navy Tr 4756/ONI Tr 2194

Structural Damage Caused by Air Pressure and Vibrations, (Comparison and Evaluation of Existing Damage Criteria), by O. F. Hastrup.  
DANISH, rpt, Lufttryk-og Rystelses Fremtaldte Bygningsskader (Sammenligning og Vurdering af Eksisterende Skadekriterier), Feb 1964, Cover to Cover.  
Dept of Navy Tr 4754/ONI Tr 2192

Some Considerations of Pressure Conditions in Protective Structures, by K. E. Widell.  
DANISH, rpt, Nogle Betragtninger Over Trykforholdene i Bunkere og Lign., April 1962, Cover to Cover.  
Dept of Navy Tr 4755/ONI Tr 2193

Prestressed Concrete Caissons of Reactors G-2 and G-3, by F. Conte.  
FRENCH, rpt, Commissariat a l'energie Franco-Espagnole Exposition de Madrid October 14-24, 1963.  
\*AEC ORNL-tr-1282  
EDC 8/11/66

Scientific  
Engineering (Contd)

Diffraction of a Shock Wave Around  
a Pressure Measuring Probe. Application  
of the Computational Technique of  
Lu Ting, and Ludloff, by C. Thery,  
C. Rothea-Laurent, 11 pp.  
FRENCH, rpt, Diffraction d'une Onde de  
Choc sur Une Sonde de Mesure de  
Pression. Application de la Methode de  
Calcul de Lu Ting et Ludloff, Report No  
N 24/65, pp 3-14. 9700742  
Dept of Navy/ ONI Tr No 2183

Automation on the Freighter Oyonnax, 3 p.  
FRENCH, per, Journal de la Marine Marchande,  
5 May 1966.  
Dept of Comm  
Maritime Admin

Study of the Experimental Device Utilized,  
by Henri Bernier, 39 pp.  
FRENCH, rpt, Rapport Commissariat a L'Energie  
Atomique - France #CEA-R-2497, 1964, pp 29-54.  
9233076  
AEC SC-T-66-0729

Prestressed Concrete Caissons - Reactors G-2 and  
G-3 - Pilot Experiment.  
FRENCH, rpt, Reacteurs G2 and G-3 - Les Caissons  
en Beton Precontraint - Experience D'Exploit-  
ation - Avril, 1966.  
\*AEC ORNL-tr-1284  
EDC 8/11/66

Sealing Gasket, by M.J.B. Barbarou.  
FRENCH, per, Patent No 610,973, 21 Jun 1926.  
Dept of Navy Tr 4749/APL JHU T-1821

Method for Preparation of Epoxy Resin Base Pro-  
ducts Containing a Filler and Resisting Leakage  
Currents, 6 p.  
FRENCH, pat, Patent No 1,267,518.  
Dept of Comm  
Patent Office

The Barge Carrier as Seen by a Navigator, by  
Wolfgang Schoenfeldt, 5 p.  
GERMAN, per, Hansa, No 7, April 1966.  
Dept of Comm  
Maritime Admin

Scientific  
Engineering (Contd)

Cable Oscillatory Resistance Measurement  
With the Polyscope, by W. Bajorat, 5 pp.  
GERMAN, per, Die Kurzinformation, No 14,  
Mar 1965, pp 31-33.  
ACSI I-9691  
ID 2204025466

Some Notes on the Overall Symmetry of Spherical  
Harmonics, by Hans-Joachim Bunge.  
GERMAN, per, Monatsber. Deut. Akad. Wiss. Vol 7,  
No 5/6, 1965, pp 351-360.  
\*AEC ORNL-tr-1286  
AEC 7/21/66

On Estimating the Probability of Stability  
of Stochastic Systems, by H. Bunke.  
GERMAN, per, Monatsberichte der Deutschen  
Akademie der Wissenschaften zu Berlin,  
Vol V, No 5, 1963, pp 277-280.  
\*FTD-MT-66-429

Road-Building Machinery at the Leipzig  
Spring Fair 1965, by M. Feller, 20 pp.  
GERMAN, per, Die Strasse, No 6, June  
1965, pp 280-291.  
ACSI J-0125  
ID 2204031666

Niedemann-Franz-Lerenz Law and Its  
Application in the High Temperature Field,  
by Roberto Evangelisti, 21 pp.  
ITALIAN, per, Rivista di Ingegneria, no 8,  
1965, pp 761-771, pp 761-771. 9233099  
AEC LA-Tr-66-22

Boiling Heat Transfer at the Coexistence of  
Nucleate and Film Regions, by Kaneyasu NISHIKAWA,  
Ryutaro SHIMONURA.  
JAPANESE, per, Japan Soc. Mech. Engrs, Vol 29,  
No 204, Aug 1963, pp 1381-1388. 9233271  
AEC NSJ-tr-47

Thermal Stress Analysis for Reactor Pressure  
Vessel Nozzles, by Kunio HANADA.  
JAPANESE, per, Hitachi Hyoron (Tokyo), Vol 45,  
No 12, Dec 1963, pp 91-94. 9233263  
AEC NSJ-tr-52

The Experimental and Analytical Determination of  
Flow Characteristics of Pneumatic Resistances, by  
Lech. M. Kaminski. 14 pp.  
POLISH, per, Archiwum Automatyki i Telemekhaniki,  
Vol 8, No 3, 1963, pp 335-346. 9700936  
FTD-TT-65-1758

Scientific  
Fuels & Propulsion

Motion of Two Parts after Bursting of Gas Tank in a Vacuum, by G. L. Grodzovsky, F. A. Kusanov.  
RUSSIAN, rpt, Dvizheniye Dvukh Chastei Posle Razryva Ob'yema a Gazom v Vakuum 1965.  
NASA TT F-10,135

The Use of Ammonia as a Neutralizing Agent in Marine Diesels Operating on Sour Fuel, by Yu. M. Akivis, G. N. Kharin, et al, 4 pp.  
RUSSIAN, per, Khimiya i Tekhnologiya Topliva i Masel, No 4, 1964, pp 49-50.  
9700736  
Dept of Navy/ONI Tr no 2181

The Colloidal-Chemical Properties and Micro-Structure of Lithium Greases, by G. G. Shchegolev.  
RUSSIAN, per, Khim. i Tekhnol. Topliva i Masel, No 8, 1965, pp 48-55.  
NLL Ref: 9022.9 1965 (1115)

Separation of Vanadium From Crude Oils and Petroleum Products by Means of Aqueous Sulfonic Acid Solutions, by A. V. Kotova, S. V. Yemel'yanova, 5 pp.  
RUSSIAN, per, Khimiya i Tekhnologiya Topliva i Masel, No 10, 1965, pp 29-31. 9700739  
Dept of Navy/ONI Tr No 2180

Power Characteristics of Fuels for Aviation Gas-Turbine Engines, by V.N. Zrellov. 10 pp.  
RUSSIAN, per, Neftepererabota i Neftekhimiya, No 2, 1964, pp 22-26. 9700965  
FTD-TT-65-1905

Use of Microbiological Methods in the Petroleum Industry, by Endre Vámos,  
HUNGARIAN, per, Magyar Kemikusok Lapja, No 10, 1965, pp 521-526.  
\*ACSI J-0311  
ID 2204036466

Microbial Desulfurication of Petroleum, by Shin'ya Tsuru.  
JAPANESE, per, Institute of Applied Microbiology, Vol XIX, No 8,  
\*ACSI J-0313  
ID 2204036666

Carbon Gas Generation, Using Liquid Fuels, by Jerzy Naczynski and Karol Kaczmarek, 6 pp.  
POLISH, per, Gaz, Woda i Technika Sanitarna, No 4, Apr 1966, pp. 110-113.  
JPRS 36083

Scientific  
Materials & Metallurgy

A Ferrite-Triode Printed Circuit CARD, Controlled by a Trigger, by N. A. Yarmosh. 11 pp.  
RUSSIAN, rpt, AN BSSR. Ferrity i Beskontaknyye Elementy, Minsk, 1963, pp 390-398. 9700940  
FTD-MT-65-200

An Investigation of the Influence of Zirconium on the Structure and Properties of Carbon Steel, by V. Ya. Savenkov.  
RUSSIAN, per, Akad. Nauk UK SSR Metalloved. Term. Obrab. Stali i Chuguna, Vol 18, 1962, pp 67-72.  
\*BISI 4961

The Structure of the Energy Spectrum of Ions Scattered by a Single Crystal, by Ye. S. Mashkova, V. A. Molchanov, 5 pp.  
RUSSIAN, per, Dok Ak Nauk SSSR, Ser Fiz, Vol CLXVI, No 2, 1966, pp 330-332. 9233089  
AEC SC-T-66-0730

Forward Slip in the Rolling of Strip From Metal Powders, by V. P. Severdenko, E. B. Lozechnikov.  
RUSSIAN, per, Doklady Akad. Nauk USSR, No 4, 1963, pp 244-246.  
\*BISI 4912

The Influence of Creep on Constant Tension Condition of Thin Lamellar Coatings, by Y. G. Skomorovskiy.  
RUSSIAN, per, Doklady po Gidrotekhnike, No 4, 1962, pp 38-47.  
NLL RTS 2913

At Each Working Position, by D. Zhilyaev.  
RUSSIAN, np, Ekon. Gazeta, No 50, Dec. 17, 1965.  
\*BISI 4953

Structure of the Flow in Relative Motion at the Inlet of a Centrifugal Compressor Impeller, by B. L. Gumbin. 7 pp.  
RUSSIAN, per, Energomashinostroyeniye, No 10, 1964, pp 43-44. 9700967  
FTD-HT-66-187

Theory of Ultrasonic Absorption in Metals by Yu. A. Kashlev.  
RUSSIAN, per, Fizika Metallov i Metallovedeniya, Vol XXI, No 1, 1966, pp 3-11.  
\*Dept of Navy/APL/JHU No J-831

Scientific  
Materials & Metallurgy (Contd)

The Effect of Gases on the Quality of  
Titanium Alloy Castings, by E. Ye. Kukkonen.  
4 pp.  
RUSSIAN, rpt, Gazy v Litom Metalle,  
1964, pp 150-153.  
ACSI I-9578  
ID 2204020366

Rapidly Hardening Moulding Materials  
with a Base of Dextrin, Sulphite Liquor  
and Water-Glass Dextrin, by A. Gebauer.  
GERMAN, per, Giesserei-Technik, Vol 6,  
No 9, 1960, pp 280-281.  
\*BISI 4981

Forced Discontinuous Oscillations  
of a Fluid in a Pipeline, by M. S. Matanzon.  
RUSSIAN, per, Izv Ak Nauk SSSR, Mekhan,  
No 2, 1965, pp 33-42.  
\*NASA TT F-443

Electrolytic Desulphurization of Pig Iron,  
by O. A. Esin, et al.  
RUSSIAN, per, Izv. Akad Nauk SSSR. OTN, Dec.  
1957, pp 71-76.  
BISI 4843

Turbulent Boundary Layer on a Flat Plate  
in an Incompressible Fluid, by  
G. S. Glushko.  
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Mekh,  
No 4, 1965, pp 13-23.  
NASA TT F-10,080

Mechanism of Carbon Reduction on and Below  
the Surface of an Iron Melt, by I. A. Moncharov.  
RUSSIAN, per, Izv. VUZ Chern. Met., No 1, 1965,  
pp 10-16.  
BISI 4869

Mechanical Properties of Alloys of the Quaternary  
System Nb-W-Mo-Zr at Temperatures of 1000-1600°C,  
by Ye. N. Savitskiy, A. N. Zakharov. 11 pp.  
RUSSIAN, per, Izvestiya VUZ, Chernaya Metal-  
lurgiya, No 1, 1965, pp 104-109. 9700950  
FTD-TT-65-1471

Investigation into the Deformation of  
Metals During Upsetting Under Vibra-  
tional Loads, by V. I. Zalesskiy,  
I. P. Volkov.  
RUSSIAN, per, Izvest. VUZ Chern. Met.  
No 9, Sept. 1965, pp 98-102.  
HB 6853

Scientific  
Materials & Metallurgy (Contd)

Effect of Zirconium on the Grain Size of  
Austenite on Heating Structural Alloy  
Steel, by V. F. Zubarev.  
RUSSIAN, per, Izv. VUZ Chern. Met., No 12,  
1963, pp 141-146.  
\*BISI 4962

Effect of Hardening Temp. on Ageing of  
0.05% C Steel, by Yu. P. Gul'.  
RUSSIAN, per, Izv. VUZ Chern. Met., No 2,  
1966, pp 107-114.  
\*BISI 4955

Desulphurization of Pig Iron in Blast  
Furnace Hearth When Operating with Small  
Slag Bulk, by Yu. M. Borts.  
RUSSIAN, per, Izv. VUZ Chern. Met. Apr.  
1966, pp 19-24.  
\*HB 6897

Relationship Between a Calculated Blast  
Furnace Index and the Composition of the  
Iron, by B. P. Dovgalyuk.  
RUSSIAN, per, Izv. VUZ Chern. Met., No 5,  
1966, pp 31-35.  
\*BISI 4960

Organic Sulphur Compounds in Sulphate  
Pulp Cooking, by B. D. Bogomolov,  
G. F. Prokshin.  
RUSSIAN, per, Izv. VUZ Lesnoi Zhurnal,  
No 5, 1961, pp 147-155.  
NLL Ref: 5828.4F 1965 (5798)

Influence of Concentrator on Stress State and  
Stress-Rupture Strength, by V. I. Boikov.  
RUSSIAN, per, Izv. VUZ Mashin, No 6, 1964,  
pp 42-50.  
\*BISI 4945

Calculation of Pressure of Metal on the  
Rolls During Rolling of Bimetal,  
by A. S. Gulyaev.  
RUSSIAN, per, Izv. VUZ Tsvet. Met. No 2,  
1965, pp 140-146.  
\*BISI 4916

Molybdenum Disulfide-Base Solid Lubri-  
cants, by Z. S. Rubtsova, L. N. Sentyurikhina.  
RUSSIAN, per, Khimiya i Tekhnologiya Topliv  
i Masel, No 11, 1965, pp 41-45.  
ATO 66-52

Scientific  
Materials & Metallurgy (Contd)

Full Mechanization of Underground Mines for Non-Ferrous Metals, by I. V. Usevich. RUSSIAN, bk, Kompleksnaya Mekhanizatsiya Podzemnykh Rudnikov i Svetnoi Metallurgii, 1965, 327 pp.  
NLL R 39841

Investigation of Frictional Properties of Rubber Soles, by Z. A. Gritsenko, B. A. Safray, et al. 9 pp. RUSSIAN, per, Kozhevenno-Obuvnaya Promyshlennost', No 9, 1964, pp 9-13.  
ACSI I-8937C  
ID 2204066465

Operational Properties of Plastic Lasts, by V. L. Peglovskiy. 12 pp. RUSSIAN, per, Kozhevenno-Obuvnaya Promyshlennost', No 9, 1964, pp 21.  
ACSI I-8937A  
ID 2204066465

Unit for Manufacture of Footwear Bottoms, by V. Gorbanev, 4 pp. RUSSIAN, per, Kozhevenno-Obuvnaya Promyshlennost', No 9, 1964, p 22.  
ACSI I-8937B  
ID 2204066465

Silicon Solar Batteries, by A. Ya. Gliberman, A. K. Zaytseva. 73 pp. RUSSIAN, bk, Kremniyevyye Solnechnyye Batarei, Moskva, 1961, Leningrad, pp 1-72. 9700943-V  
FTD-MT-64-204

Glass Fibre Reinforced Polycarbonate Part I. The Mechanical Characteristic Pattern, by E. Streib, E. Oberbach, 20 pp. RUSSIAN, per, Konstruktsiya, Jan 1966. 9700863  
Dept of Navy/ONI Tr No 2192

The Problem of Heating Steel Billets in Fused Glass, by E. A. Shadek. RUSSIAN, per, Kuznechn. ShTamp. Proizvodstvo, No 9, Sept. 1965, p36.  
HB 6663

Forming Die Inserts from Liquid Steel, by A. A. Ryzhikov et al. RUSSIAN, per, Kuznechno-Shtampov, Vol 7, Oct. 1965, pp 41-42.  
BISI 4791

Scientific  
Materials & Metallurgy (Contd)

Chopping, by S. Sh. Yashaev. RUSSIAN, per, Kuznechno-Shtampov, Nov. 1965, pp 12-14.  
\*BISI 4918

Investigation of the Hot Extrusion of Alloys of Copper Powder with Boron Nitride Dispersions, by L. I. Zhivov. RUSSIAN, per, Kuznechn. ShTamp. Proizvodstvo, Vol 8, No 3, 1966 pp 1-3.  
HB 6865

Metallographic Laboratories, by E. V. Panchenko, et al. RUSSIAN, bk, Laboratoriya Metallografii, 1965, 440 p.  
NLL R 40146

Surface Roughness and Rheological Properties of Adhesives as Factors Determining Optimum Thickness of Glue Line, by V. M. Khrulev. RUSSIAN, per, Mekh. Polim., No 6, 1965, pp 103-107.  
\*BISI 4950

Organization, Planning and Financing of Building in Ferrous Metallurgy, by D. L. Maizel's. RUSSIAN, bk, Organizatsiya, Planirovanie i Finansirovanie Kapital'nogo Stroitel'stva v Chernoi Metallurgii, 1965, 326 pp.  
NLL R 39652

Advances in Briquetting and Coking of Coal, by E. M. Taita. RUSSIAN, bk, Novoe v Briketirovanii i Koksovanii Uglei, 1965, 178 pp.  
NLL R 39667

Advances in the Processing and Transportation of Raw Materials in the Cement Industry, by L. A. Bernshtein. RUSSIAN, bk, Novoe v Tekhnologii Pererabotki i Transportirovaniya syr'ya v Tsementnoi Promyshlennosti, 1965, 192 pp.  
NLL R 39824

New Glasses and Glass Materials, by N. M. Bobkovoi, et al. RUSSIAN, bk, Novye Stekla i Steklo Materialy, 1965, 175 pp.  
NLL R 40046

Scientific  
Materials & Metallurgy (Contd)

Chemical Reactions on the Surfaces of Glass Fibers Used in Glass-Reinforced Plastics, by Ye. B. Trostyanakaya. RUSSIAN, per, Plasticheskiye Massy, No 11, 1965, pp 67-69.  
NASA TT F-10,099

Methods of Increasing Effectiveness of Use of Plastics, by M. Yarkovlev. 9 pp. RUSSIAN, rpt, Plastmassy Vmesto Metalla, 1965, pp 7-14.  
ACSI I-9854  
ID 2204007766

Machine Parts Made of Caprone, by R. Davydova, 9 pp. RUSSIAN, rpt, Plastmassy Vmesto Metalla, 1965, pp 61-69.  
ACSI I-9854  
ID 2204007766

Determination of the Surface State of Metal Powder Particles by Scattering of Light, by A. I. Raychenko. RUSSIAN, per, Poroshkovaya Met., Vol IX, (33), 1965, pp 69-75.  
NASA TT F-10,086

Some Problems in Sintering and Compaction of Stock Rolled from Powders, by O. A. Katrus. RUSSIAN, per, Poroshkovaya Metallurgiya, No 2, (38) Feb. 1966, pp 31-39, 6.  
IIB 6872

Slanting Shells of Rotation of Variable Thickness in Spatial Temperature Field, by A.D. Kovalenko. 16 pp. RUSSIAN, per, Prikladnaya Mekhanika, Vol 6, No 3, 1960, pp 241-249. 9700574  
FTD-TT-65-1376

Antisymmetrical Stressed State of a Conical Shell of Variable Thickness, by Ya. M. Grigorenko. 12 pp. RUSSIAN, per, Prikladnaya Mekhanika, Vol 6, No 4, 1960, pp 385-392. 9700620  
FTD-TT-65-1377

Optimal Regimes For Slowing Down the Rotational Motion of a Symmetrical Body, by B. A. Smol'nikov. RUSSIAN, per, Prikladnaya Mekhanika, Vol XXVIII, No 4, 1964, pp 725-734.  
NASA TT F-10,140

Scientific  
Materials & Metallurgy (Contd)

Beams Made From Two Different Grades of Steel, by V. A. Baldin. RUSSIAN, per, Promyshlennoi Stroitelstvo, No 11, 1964, pp 20-23.  
BISI 4800

Extrusion Through a Roll Die, by Z. I. Yusipov, I. G. Kremenskiy. RUSSIAN, per, ShTamp. Proizvodstvo, Vol 8, No 1, 1966, pp 1-3.  
HB 6851

Combined Opencast and Adit Mining and the Reworking of Ore Deposits, by V. V. Kulikov. RUSSIAN, bk, Sovmestnaya i Povtornaya Razrabotka Rudnykh Mestorozhdenii, 1965, 292 pp.  
NLL R 39778

Securing Machinery in Plastic Vessels, by Yu. V. Razdrogin, 147 pp. RUSSIAN, per, Sudostroyeniye, No 41, 1965.  
Dept of Navy Tr 4729/Bureau of Ships Tr No 963

Technical and Economic Principles of the Heat Treatment of Metals, by A. G. Solodikhin. RUSSIAN, bk, Tekhnicheskie i Ekonomicheskie Osnovy Termicheskoi Obrabotki Metallov, 1965, 451 pp.  
NLL R 39806

Methods for Determining the Mechanical Properties of Materials, by B. A. Avdeev. RUSSIAN, bk, Tekhnika Opredeleniya Mekhanicheskikh Svoistv Materialov, 1965, 488 pp.  
NLL R 39583

Theory and Practice of Dust Control in Coal Mines, by A. I. Ksenofontova and A. S. Burchakov, 13 pp. RUSSIAN, bk, Teoriya i Praktika Bor'by s Pyli'yu v Ugol'nykh Shakhtakh, 1965.  
JPRS 36195

The Fuel-Power Balance of the USSR, by A. Ya. Riznik, S. E. Litvak. RUSSIAN, bk, Toplivno-Energeticheskii Bal Balans SSSR, 1965, 151 pp.  
NLL R. 39849

Scientific  
Materials & Metallurgy (Contd)

Compounds of the Rare-Earth Metals With Aluminum and Their Crystalline Structures, by P.I. Kripyakevich, I.I. Zalutskiy. 4 pp. RUSSIAN, per, Trudy AN SSSR Institut Metallurgii, 1964, pp 144-145. 9700954  
FTD-HT-66-186

Grafted Copolymers of Cellulose With Certain Vinyl Monomers, by U. Azizov, Kh.U. Usmanov, et al. 10 pp. RUSSIAN, per, Trudy Akad. Nauk UZSSR. Institut Khimiy Polimerov, Khimiya i Fiziko-Khimiya Prirodnikh i Sinteticheskikh Polimerov, No 1, 1962, pp 23-28. 9700693  
FTD-TT-65-1481

Pressure of Metals on the Rolls of the Continuous 30-102 Tube Rolling Mill, by Ya. L. Vatkin et al. RUSSIAN, per, Trudy Dnepropetrovskiy Metallurgicheskii Institut. Nauch., Vol 49, 1965, pp 332-342.  
\*BISI 4923

Roll Passes and Bearing Plates of Mills for Tube Rolling, by A. P. Chekmarev et al. RUSSIAN, per, Trudy Dnepropetrovskiy Metallurgicheskii Institut. Nauch., Vol 49, 1965, pp 343-359.  
\*BISI 4924

Interaction of Aluminum With Cryolite-Alumina Melts, by M. M. Vetyukov. 39 pp. RUSSIAN, per, Trudy Leningrad. Politekhnichekiy Institut, No 239, 1964, pp 39-56. 9700933  
FTD-MT-65-193

On the Theory of Electrolytic Refining of Metals in Melts With Liquid Electrodes, by Yu. V. Baymakov. 39 pp. RUSSIAN, per, Trudy Leningrad. Politekhnichekiy Institut, No 239, 1964, pp 70-81. 9700933  
FTD-MT-65-193

The Concentration of Creep Stresses and Strains in Aluminium Alloy Plates, by S. V. Serensen, N. A. Borodin. RUSSIAN, per, Trudy Moskovskogo Aviat-sionnogo Tekhnicheskogo Instituta, Vol 61, 1964, pp 73-85.  
NLL RTS 3035

Scientific  
Materials & Metallurgy (Contd)

New Capabilities of Spectral Analysis of Metals and Alloys With the Use of Preliminary Batching by Contact Spark Discharge, by K.V. Gudkova, K.I. Taganov, et al. 9 pp. RUSSIAN, per, Trudy Po Khimii i Khimicheskoy Tekhnologii Gor'kiy, No 1, 1963, pp 26-30. 9700952  
FTD-TT-65-1483

Pilot-Plant Unit for Electrolytic Tinning of Steel Strip in Salt Melts, by A. I. Vitkin. RUSSIAN, per, Tr. Sb. Tsentr. Nauchn. Issled. Inst. Chernoi Met, No 28, 1962, pp 138-145.  
BISI 4538

Methods of Testing Metals and Alloys for Creep and Vibratory Creep, by L.T. Timoshuk, A. A. Gudkov. 23 pp. RUSSIAN, per, Trudy Sbornik, Tsentral'nyy Nauchno-Issledovatel'skiy Institut Chernoy Metallurgii, No 38, 1964, pp 123-135. 9700961  
FTD-HT-66-215

Influence of Impurities and Rare-Earth Elements on the Properties of Alloys, by M. V. Pridantsev. 225 pp. RUSSIAN, bk, Vliyaniye Primesey i Redkozemel'nykh Elementov Na Svoystva Splavov, Moskva, 1962, pp 1-208. 9700947-V  
FTD-MT-64-295

Heat Resistant Chromium Carbide Coating With a Silicate Binder, by Ye. A. Antonova. E. E. Popov. RUSSIAN, per, Zashchita Metalloy, Vol I, No 6, 1965, pp 687-691.  
\*NASA TT F-10,186

A Method of Making Mesh Filters From Materials and Alloys, by K. L. Chevashova. 3 pp. RUSSIAN, Patent No. 134092, 18 Mar 1960, 2 pp. 9700953  
FTD-HT-66-189

Ch'I-Lien Shan Copper Deposit of the Copper Bearing Pyrite Type and Its Exploration, by Hu Hui-min, Wang Wen-kuang and Sun Haueh-ch'un, 12 pp. CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 295-301.  
JPRS 36151

Scientific  
Materials & Metallurgy (Contd)

Problems on the Distribution, Genesis and Technical Treatment of Cobalt in Shou-Wang-Fen Copper Deposit, by Wang Jun-ming, 7 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 302-305.  
JPRS 36151

Opinions on the Origin and the Age of Shansi Type Iron Ore Deposit and Bauxite "Bed G" in North China, by Chao I-yang, 9 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 306-309.  
JPRS 36151

New Ideas about the Problem on the Age of Bauxite "Bed G" in North China Platform, by Chang Wen-po, 9 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 310-313.  
JPRS 36151

On the Age of Bauxite "Bed G" in North China, by Chang Ch'ung-kan, 6 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 314-316.  
JPRS 36151

Discovery of the Rare Element Minerals in Post-Cambrian Granitic Pegmatite in Yenshan Area, by Mang Tung-hung, 5 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 317-319.  
JPRS 36151

Opinions on "Preliminary Study of the Genesis, Alteration and Mineral Formation of Yao-Kang-Hsien Granite Intrusion in Hunan", by Lan Chia-ch'ien, 5 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 321-323.  
JPRS 36151

Opinions on "Problem on the Origin of the Manganese Ore Lenses" by Lin Hsin-ying, 5 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 18, No 4, Jul 1958, pp. 325-327.  
JPRS 36151

Metal Deposits in Igneous Rock in Eastern Ch'i-Lien Mountain, by Hu Hui-min, 36 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 19, No 1, Jan 1959, pp. 1-12.  
JPRS 36152

Scientific  
Materials & Metallurgy (Contd)

Geological Characteristics and Rules of Mineralization of Lead-Zinc Beds on Hunan-Hupeh Border, by Ch'en Mou-yu, 19 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 19, No 1, Jan 1959, pp. 13-18.  
JPRS 36152

Sedimentary Conditions of Alumina Beds in Western Honan, by Shu Wen-po, 8 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 19, No 1, Jan 1959, pp. 19-21 and 12.  
JPRS 36152

Geological Characteristics and Sedimentation Environments of Upper Permian Coal Fields in Eastern and Northeastern Yunnan, by Ting Hsun-fan and Chia Shih-cheng, 16 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 19, No 1, Jan 1959, pp. 22-27.  
JPRS 36152

Division and Comparison of Pre-Cambrian Strata of China, by Sun Yun-chu, 20 pp.  
CHINESE, per, Ti-chih P'ing-lun, Vol 19, No 1, Jan 1959, pp. 28-33.  
JPRS 36152

History of Development of Central Sector of the Western Perimeter of Ordos Platform and Environment of Sedimentation of Upper Permian Yen-Ch'ang System, by Chang Wen-chao, 11 pp.  
CHINESE, per, Ti-chih Lun-p'ing, Vol 19, No 1, Jan 1959, pp. 37-40.  
JPRS 36152

Education and Research in Metallurgy -- Present and Future, by Dr. Eng. Karl-Friedrich Ludemann, 15 pp.  
GERMAN, per, Neue Hütte, No 4, Apr 1966, pp. 194-200.  
JPRS 36083

Extending the Life of Metals, by N. Vescan, 6 pp.  
RUMANIAN, per, Viata economica, Vol 4, No 16, 22 Apr 1966, p. 11.  
JPRS 36083

The Mechanism of Chemical Passivation and Corrosion of Metals, by M. Prazak, V. Prazak.  
CZECH, per, Chemické Listy, Vol 50, No 1, 1956, pp 23-29.  
BISI 4543

Scientific  
Materials & Metallurgy (Contd)

Assessing Various Methods of Evaluating  
Coke Rates, by J. Lenfeld.  
CZECH, per, Hutník, Vol 14, No 7, 1964,  
pp 315-317.  
BISI 4651

Production of Complex Deoxidizers on  
an Iron-Manganese-Silicon-Aluminum  
Base, by M. Cervinka.  
CZECH, per, Hutník, Vol 15, No 11, 1965,  
pp 481-485.  
IIB 6780

Subcutaneous Blowholes in Rimming Steel,  
by V. Parma.  
CZECH, per, Hutník, Vol 16, No 2, 1966,  
pp 72-75.  
\*IIB 6895

Heat Losses Through the Brickwork of the  
Working Space of Soaking Pit Furnaces,  
by R. Kremer, B. Lonsky.  
CZECH, per, Hutn. Listy, Vol 18, No 3, 1963,  
pp 185-193.  
BISI 4863

Control of the Thermal Zones Within Blast-  
Furnaces, by J. Czernek.  
CZECH, per, Hutn. Listy, Vol 19, No 11, 1964,  
pp 769-774.  
BISI 4646

The Effect of Temper Rolling on the Mechanical  
Properties of Deep-Drawing Quality Sheet,  
by M. Endrle, L. Pokluda.  
CZECH, per, Hutn. Listy, Vol 20, No 6, 1965,  
pp 411-418.  
BISI 4816

Mathematical Model of the Sintering Process  
for the Sintering Plant of the Trinec Iron  
Works, by M. Hucka.  
CZECH, per, Hutn. Listy, No 2, 1966, pp 84-89.  
\*BISI 4931

Deoxidation Control of Rimming Steel,  
by L. Kodrle.  
CZECH, per, Hutn. Listy, No 4, 1966, pp 238-244.  
\*IIB 6894

Scientific  
Materials & Metallurgy (Contd)

New Czechoslovak Plastic Shipping Containers,  
by M. Cervenka.  
CZECH, per, Obaly, No 2, 1966, pp 33-37.  
\*ACSI J-0327  
ID 2204032766

Shipping Containers Made of Glass Laminates  
by I. Rac.  
CZECH, per, Obaly, No 2, 1966, pp 60-61.  
\*ACSI J-0327  
ID 2204032766

First Danish Map of all Mineral Funds in  
Greenland, by K. Ellitsgaard-Rasmussen.  
DANISH, rpt, 1965.  
Dept of Inter No  
403(980) qE(58f

Spin Polarisation of Conduction Electrons  
in Iron and Nickel, by E. Daniel.  
FRENCH, rpt, 1966.  
\*AEC

Finishing Problems in Special Steel Works,  
by M. J. Philibert.  
FRENCH, rpt, Association Technique de la  
Siderurgie Francaise, Paris, May 14, 1965.  
\*BISI 4982

The Evolution of Blast Furnace Refractory  
Problems Since 1959, by M. J. Schoendoerffer.  
FRENCH, per, Bull. Soc. Franc. Ceram., Oct.  
Dec. 1962, pp 51-66.  
BISI 4815

The Forges de la Providence LK-Kaldo  
Steelworks at Narchienne, by J. Ledune.  
FRENCH, per, CNRM, Dec. 1965, pp 33-45.  
BISI 4714

Acoustic Method of Temperature Measurement;  
Industrial Applications in Metallurgy,  
by Y. Noel et al.  
FRENCH, per, C.N.R.M. No 5, Dec. 1965,  
pp 53-63.  
\*BISI 4919

Example of Calculation of the Character-  
istics of a Hot Blast Stove, by D. Sanna.  
FRENCH, bk, Centre d'Etudes Supérieures de  
la Siderurgie Les Cahiers du Cessid,  
Cahier I, 1964, pp 5-47.  
BISI 4645

Scientific  
Materials & Metallurgy (Contd)

Some Recent Developments in Optical Methods Applied to the Study of the Microprofile of Metal Surfaces, by M. Froment.  
FRENCH, per, Electrochim. Acta, Vol 11, 1966, pp 21-30.  
\*BISI 4939

Special Steels Used for Aviation, by M. Tetart, M. R. Lachenaud.  
FRENCH, per, Estampage Forge, Nov. 1965, pp 37-49.  
BISI 4724

Behaviour of Experimental Die-Coatings, by M. Drouzy.  
FRENCH, per, Fonderie, Oct. 1965, pp 338-341.  
BISI 4854

Research on Aluminum, Nickel and Copper Carbides, by A. Brinor, R. Senglet, 29 pp.  
FRENCH, per, J. de Chimie Physique, No 13, 1915, pp 351-375. 9233087  
AEC ORNL-TR-1193

Stairworks Research with Pilot Furnaces, by M. B. Trentini.  
FRENCH, per, J. Four Elect., No 3, 1965, pp 89-90.  
BISI 4726

Spin Polarisation of Conduction Electrons in Ferromagnetic Metals, by E. Daniel.  
FRENCH, per, J of Physics and Chemistry Solids, Vol XXIV, 1963, pp 1601-1607.  
\*AEC

Rubberized Fabrics for Industrial Uses,  
FRENCH, rpt, Le Joint Francais, pp 1-33.  
\*ACSI J-0299  
ID 2832004266

Study of the Precipitation of Petn From Acetone, by Paul Aubertein, Luc Verdillion.  
FRENCH, per, Memorial des Poudres, Vol 45, 22 Mar 1965, pp 115-129. 9233252  
AEC MLM-tr 1330

Refusion by the Use of Electro-Conductive Slag, by B. E. Medovar et al.  
FRENCH, per, Met. Constr. Mecan., Vol 97, Nov. 1965, pp 795-797.  
\*BISI 4984

Scientific  
Materials & Metallurgy (Contd)

The Behavior of Plastics in Fire by A. Audouin, 27 pp.  
FRENCH, per, La Revue Maritime, No 221, May 1965, pp 619-636. 9700748  
Dept of Navy/ONI Tr No 2182

Micrographic Study of the Oxidation of Iron and of the Transformations of Ferrous Oxide, by G. Chaudron, R. Collongues.  
FRENCH, per, Rev. Met. Vol 48, Dec. 1951, pp 917-922.  
BISI 4881

Contribution to the Study of Transformations Caused by Tempering High-Speed Steel, by A. H. Michel, J. Papier.  
FRENCH, per, Rev. Met., Vol 51, June 1954, pp 425-439.  
BISI 4767

Increase in the Creep Strength of Low-Alloy Cast Steel by Small Additions of Boron, by K. Gut et al.  
FRENCH, per, Rev. Met., Vol 60, Dec. 1963, pp 1233-1240.  
BISI 4847

The Structure of an 18-4-1 High Speed Steel Ingot, by K. Lassota.  
FRENCH, per, Rev. Met., Vol 62, 1965, pp 575-586.  
BISI 4498

Users' Views on Unformed Refractory Applications, by B. LeClerc.  
FRENCH, per, Rev. Met., Vol 62, Oct. 1965, pp 953-967.  
BISI 4797

Developments in Refractory Materials for Reheating Furnace, by J. P. Kiehl, J. Montagnier.  
FRENCH, per, Rev. Met., Vol 62, Dec. 1965, pp 1219-1223.  
BISI 4799

The Influence of Analysis on the Impact Value Anisotropy of Various Carburizing Steels, by P. Ravizza.  
FRENCH, per, Rev. Met., Vol 63, Jan. 1966, pp 23-26.  
BISI 4845

Scientific  
Materials & Metallurgy (Contd)

Mechanical Properties, Texture and Fibrous Appearance of 17% Chromium Steels, Depending on Conditions of Production, by E. Pouillard. FRENCH, per, Rev. Met., Vol 63, Feb. 1966, pp 87-103.  
\*BISI 4949

Finishing Operations of Large Mill Trains, by J. Lesage. FRENCH, per, Rev. Met., Vol 63, Feb. 1966, pp 150-164.  
\*BISI 4967

Finishing Operations in Small Section Mills: General Conclusions, by M. Desvallees. FRENCH, per, Rev. Met., Vol 63, Feb. 1966, pp 165-167.  
\*BISI 4968

Finishing Operations for Small Section Trains, by E. Gous. FRENCH, per, Rev. Met., Vol 63, Feb. 1966, pp 168-172.  
\*BISI 4969

Economic Aspects of Finishing: General Conclusions, by M. Bonaud. FRENCH, per, Rev. Met., Vol 63, Mar. 1966, pp 242-246.  
\*BISI 4970

The Use of Optical Emission Spectrometry in the Analysis of Non-Metallic Samples in Iron and Steelworks, by M. Bojic, et al. FRENCH, per, Rev. Met., Vol 63, Apr. 1966, pp 285-295.  
\*BISI 4948

Use of 35NiCr16 Steel in Aviation, by M. Le Bouc. FRENCH, per, Rev. Met., Vol 63, Apr. 1966, pp 319-321.  
\*BISI 4943

Salt Baths III - Salt Baths for Heat Treatment of High-Speed Steels, by P. Lesage, B. Coetz. FRENCH, per, Traitement Therm., Vol 2, Mar. Apr. 1965, pp 23-35.  
BISI 4505 - III

Scientific  
Materials & Metallurgy (Contd)

Method of Manufacturing Finned Tubes, by Carl Schmidt, 3 p. FRENCH, pat. Patent No 326,768.  
Dept of Com  
Patent Office

Changes in the Properties of Iron-Nitrogen Alloys Caused by Quenching and Heat Treatments Below A<sub>1</sub>, by W. Koster. GERMAN, per, Arch. Eisenh., Vol 3, 1930, pp 553-558.  
BISI 4660

Nitrogen in Industrial Iron, III - Precipitation of Nitrogen and Carbon From iron as an Example of the Breakdown of a Doubly Super-Saturated Solid Solution, by W. Koster. GERMAN, per, Arch. Eisenh., Vol 4, Sept. 1930, pp 145-150.  
BISI 4661

Deformation Resistance of Plain Carbon and Low Alloy Steels During Hot Upsetting Under a Falling Tup Hammer, by F. K. Fink. GERMAN, per, Arch. Eisenh., Vol 26, Nov. 1955, pp 655-668.  
\*BISI 4966

Measurement of Roll Force and Torque in Hot Rolling and Comparison with Theory, by E. Dahl, E. Wildschultz. GERMAN, per, Arch. Eisenh., Vol 36, Sept. 1965, pp 633-642.  
BISI 4894

A New Instrument for the Determination of the Distribution of Metallic and Non-Metallic Phases on the Surface of Specimens with the Electron Probe Micro-Analyser, by G. Dorfler, E. Plockinger. GERMAN, per, Arch. Eisenh., Vol 36, Sept. 1965, pp 649-653.  
BISI 4581

Effect of Si, Mn and S on the Reactions Between Pig Iron Melts and Blast Furnace Slags, by M. Oelsen, et al. GERMAN, per, Arch. Eisenh., Vol 36, 1965, pp 779-790.  
\*BISI 4928

Scientific  
Materials & Metallurgy (Contd)

Complementary Derivations to the Conversion of Reactants Between Slag and Metal With Permanently and Transiently Effective Phases, by H. Schenck et al.  
GERMAN, per, Arch. Eisenh., Vol 37, 1966, pp 13-19.  
\*BISI 4929

The Effect of Various Deoxidation Processes on the Properties of Mild Plain Carbon Free-Cutting Steels - I, by C. A. Muller et al.  
GERMAN, per, Arch. Eisenh., Vol 37, Jan. 1966, pp 27-41.  
BISI 4777

The Spectrometric Analysis of Pig Irons and Low Carbon, Low Manganese Steels, by P. Dickens, P. Konig.  
GERMAN, per, Archiv f.d. Eisenhüttenwesen, Vol 37, No 2, 1966, pp 127-131.  
IIB 6847

Isolation and Investigations of Oxide Inclusions in Rimming and Partly Killed Steel, by G. Molec, W. Koch.  
GERMAN, per, Arch. Eisenh., Vol 37, Feb. 1966, pp 136-143.  
\*BISI 4915

The Effect of Different Methods of Deoxidation on the Properties of Mild, Plain Carbon, Free-Cutting Steels II - Machinability, by C. A. Muller, E. Zimmermann.  
GERMAN, per, Arch. Eisenh., Vol 37, Feb. 1966, pp 145-153.  
BISI 4777 Pt. II.

Broadening of X-Ray Interference Lines in Various Heat-Treated Structural Steels by Tensile Strain in the Temperature Range of Blue Brittleness, and the Relationship with Mechanical Properties, by F. Lihl.  
GERMAN, per, Arch. Eisenh., Vol 37, Feb. 1966, pp 165-171.  
\*BISI 4951

Effect of Manganese Content on the Damping Behaviour of Nitrogen-Containing Iron Alloys, by M. Nacken.  
GERMAN, per, Archiv. Eisenh., Vol 37, March, 1966, pp 235-243.  
\*BISI 4955

Scientific  
Materials & Metallurgy (Contd)

Damping Investigations on Nitrided Iron-Molybdenum and Iron-Vanadium Alloys, by W. Koster.  
GERMAN, per, Arch. Eisenh., Vol 37, Mar. 1966, pp 245-252.  
\*BISI 4964

The Limits of Identification of Certain Alloying Elements in Steel when Measuring with the Electron Beam Microprobe, by H. de Laffolie.  
GERMAN, per, Arch. Eisenh., Vol 37, Apr. 1966, pp 291-295.  
\*BISI 4946

Contribution to the Rapid Testing of Machinability with Special Reference to a Test Method with Increasing and Decreasing Cutting Speeds, by F.L. Klaus.  
GERMAN, per, Arch. Eisenh., Vol 37, Apr. 1966, pp 297-308.  
\*BISI 4947

The Sorting, Classifying and Recovery of Fine Sand, by H. J. Feil.  
GERMAN, per, Aufbereitungs-Technik, Mar. 1966, pp 139-145.  
BISI 4882

Hydrogen Chloride Corrosion in Refuse Incineration Plants, by R. Huch.  
GERMAN, per, B. W. K. Vol 18, Feb. 1966, pp 76-79.  
BISI 4837

The Influence of Small Amounts of Niobium on the Properties of High Strength Workable Structural Steels, by K. Born.  
GERMAN, per, Sander Bleche Rohre, Vol 7, No 2, 1966, pp 80-87.  
\*BISI 4926

Pressure Vessels of Special Steels for the Storage and Transport of Liquid Gases, by K. Born.  
GERMAN, per, Sander, Bleche, Rohre, May, 1966, pp 282-289.  
\*BISI 4934

Scientific  
Materials & Metallurgy (Contd)

Diffusion as a Predominant Process in Technically Important Reactions in Coal and Coke, by W. Peters, H. Juntgen. GERMAN, per, Brennstoff-Chemie, Vol 46, No 2, 1965, pp 56-62. BISI 4362

Effect of the Ash and Ash Composition of Coals on Cokability and Coke Properties - II, by H. Echterhoff et al. GERMAN, per, Brennstoff-Chemie, Vol 46, No 4, 1965, pp 110-117. BISI 4398

New Stainless and Corrosion Resistant Austenitic Steels for Chemical Plant Construction: Mechanical Properties and Corrosion Resistance, by H. Spahn, et al. GERMAN, per, Chemie-Ing. Techn. Vol 38, 1966, pp 407-417. \*BISI 4986

The Physico-Chemical Behaviour of Cold Bonded Refractory Bricks, by M. Koltermann. GERMAN, per, Deutschen Keramischen Ges. Ber., Vol 43, No 4, 1966, pp 271-279. \*BISI 4935

Surface Testing by Surface Measuring Instruments, by A. Metz. GERMAN, per, Draht, Vol 15, Apr. 1964, pp 174-176. \*BISI 4930

A New 140 mm Stiefel Mill for the Production of Seamless Steel Tubes, by B. Pectin. GERMAN, per, Freiberger Forschungsh., 688, April 1964, pp 23-28. BISI 4851

Increasing the Output of Tube Mills Through Mechanization and Automation, by W. J. Ostrenko. GERMAN, per, Freiberger Forschungsh., B96, May 1964, pp 27-41. BISI 4850

Study of the Precipitation of  $M_{23}C_6$  Chromium Carbides in Austenitic Steels by Means of Electrolytic Phase Extraction, by H. Toma, K. Loll. GERMAN, per, Freiberger Forschungsh., B. 111, 1965, pp 133-145. BISI 4874

Scientific  
Materials & Metallurgy (Contd)

Application of X-Ray Microprobe and Electron Microscope to the Study of Duplex Nickel-Chromium Steels, by M. Vyklicky, et al. GERMAN, per, Freiberger Forschungsh., B.111, 1965, pp 147-166. BISI 4871

Investigation of the Velocity Factor of Outflow Speeds in the Pouring of Cast Iron, by A. Holzmüller. GERMAN, per, Giesserei, Vol 50, No 15, 1963, pp 454-457. HB 6784

Importance of the Basic Oxygen LD Process for Steel Foundries. Part II, by R. F. Rinesch, G. Kaspar. GERMAN, per, Giesserei, Vol 52, No 16, 1965, pp 485-493. HB 6643-II

Chemical Action of Environmental Conditions on Molten Steel After Tapping with Regard to Pinhole Formation, by J. Pribyl. GERMAN, per, Giesserei, Vol 52, Dec. 9, 1965, pp 813-820. BISI 4725

Steelplant Ingot Molds of Nodular Iron, by H. Kempers. GERMAN, per, Giesserei, Vol 53, No 1, Jan. 6, 1966, pp 15-18. HB 6802

The Green Properties of Bentonite-Bonded Moulding Sands, by I. Bindernagel, et al. GERMAN, per, Giesserei, Feb. 17, 1966, pp 93-96. \*BISI 4940

Suggestions for Controlling Cement-Bonded Ferro-Alloy Briquettes, by F. Röll. GERMAN, per, Giesserei, Mar. 31, 1966, pp 165-168. \*BISI 4927

Planning of, and Operational Experience in an Extensively Automated Spectrometric Laboratory of a Steel Foundry, by H. Goossens, G. Hopfner. GERMAN, per, Giesserei, Vol 53, No 6, 1966, pp 161-166. HB 6852

Scientific  
Materials & Metallurgy (Contd)

Mechanical Properties, Structure, and Inoculation of Antimony-Containing Cast Iron, by K. Wagner.

GERMAN, per, Gieserei, Apr. 14, 1966, pp 250-254.

\*HB 6864

Development of a Method for the Rapid Determination of the Nitrogen Content of Steels by the Vacuum Smelting Technique, by Taking in Special Consideration the Metallurgical Processes Occurring During Degassification of Carbon-Saturated Iron Melts, by A. Gerhardt, et al.

GERMAN, per, Gies. Techn. Wiss., Vol 17, 1965, pp 203-209.

\*BISI 4952

Structures of Layers Produced by Bath Nitriding and by Nitriding in Ammonia Atmospheres with Hydrocarbon Additions, by B. Prenosil.

GERMAN, per, Harterei-Techn. Mitt., Vol 20, Apr. 1965, pp 41-49.

BISI 4720

Testing of Bath-Nitrided Parts, by B. Finnmern.

GERMAN, per, Harterei-Techn. Mitt., Vol 20, Apr 1965, pp 50-57.

BISI 4721

The Influence of Salt Bath Nitriding on the Alternating and Pulsating Fatigue Strength of Smooth and Notched Specimens of Wrought, Plain C.45 Steel, by G. Seeger.

GERMAN, per, Harterei-Techn. Mitt., Vol 21, 1966, pp 34-44, disc. 44-46.

\*BISI 4988

Mechanical Handling in a Tube Mill, by G. Reich.

GERMAN, per, Hebezeuge und Fördermittel, Vol 5, Apr. 1965, pp 97-100.

BISI 477a

Diesel Lift Truck, by H. Springer. 9 pp.

GERMAN, per, Hebezeuge und Fördermittel, No 2, Feb 1966, pp 42-45.

ACSI J-0119

ID 2294031166

Scientific  
Materials & Metallurgy (Contd)

Results of Applying an Elevated Top Gas Pressure on the Output From Blast Furnace During Intensification of its Operation, by E. Terlecki.

POLISH, per, Hutnik, Vol 29, No 6, 1962, pp 218-225.

BISI 4648

Component Systematisation and Parts Family Production, by H. Opitz.

GERMAN, per, Industrie-Anzeiger, Vol 87, Dec. 24, 1965, pp 2485-2496.

BISI 4733

Production Planning and Manufacture on the Part-Family Basis, by P. Dill.

GERMAN, per, Industrie-Anzeiger, Vol 87, Dec. 24, 1965, pp 2497-2501.

BISI 4734

Economic Questions in Relation to Related Part Group (Batch) Production, by H. Elenz.

GERMAN, per, Industrie-Anzeiger, Vol 87, Dec. 24, 1965, pp 2517-2523.

BISI 4722

The High-Temperature Embrittlement of Austenitic Nickel-Chromium Steels and Nickel-Base Alloys on Neutron Irradiation, by H. Bohm et al.

GERMAN, per, Jnl. Nuclear Materials, Vol 19, 1966, pp 59-69.

\*BISI 4985

Thoughts on the Realization of Continuous Steel Production, by G. Bulle.

GERMAN, per, Kleppig-Fachber., Mar, 1964, pp 91-94.

\*HB 6900

Relation Between Steel Purity, Transverse Test Characteristics and the Anisotropy of the Fatigue Strength, by A. Buch.

GERMAN, per, Materialprüfung, No 1, 1965, pp 1-5.

\*BISI 4922

Scientific  
Materials & Metallurgy (Contd)

Magnetic and Electromagnetic Methods for the Nondestructive Testing of the Depth of Hardening of Case-Hardened Semifinished and Finished Products, Part I- Physical-Technical Fundamentals, by T. Jakel.  
GERMAN, per, Materialprufung, Vol 7, No 7, 1965, pp 243-250.  
HB 6650-I

On-Line Ultrasonic Inspection of Thick Plates Using a Pulse Echo Method, by P. Holler, H. Smit.  
GERMAN, per, Materialprufung, Vol 7, Aug. 1965, pp 296-303.  
\*BISI 4913

Auto-Spectrography in the Steel Industry, by L. Kidman.  
GERMAN, per, Materialprufung, Vol 7, Oct. 1965, pp 361-365.  
BISI 4853

Safety Against Fracture of Steel in Reinforced and in Prestressed Concrete Structures, by E.h.W. Janiche.  
GERMAN, per, Materialprufung, Vol 7, No 12, 1965, pp 449-458.  
\*AEC ORNL-tr-1305  
EDC 8/11/66

A New Process of Electroless Nickel Plating, by K. Lang.  
GERMAN, per, Metalloberfläche, Vol 19, No 8, 1965, pp 257-262.  
HB 6834

Effect of Contamination by Iron Upon the Operation of Cyanide Zinc [Plating] Baths, by F. Hasko.  
GERMAN, per, Metalloberfläche, Vol 19, No 8, 1965, pp 263-264.  
HB 6893

Influence of Machining and Electrochemical Treatment on Behaviour Under Mechanical and Chemical Stressing of an Austenitic Nickel-Chromium Steel, by H. Wiegand.  
GERMAN, per, Metalloberfläche, Vol 20, No 2-10, 1966, pp 165-172. Parts I & II.  
\*BISI 4987

Impregnated Niobium-Tantalum Alloys, by R. Kieffer, St. Windisch, H. Nowotny.  
GERMAN, per, Metall. und Technik, Vol 17, No 7, Jul 1963, pp 669-677. 9231505  
NSTIC tr 1649

Scientific  
Materials & Metallurgy (Contd)

Use of Hydrodynamic Lubrication in Wire Drawing, by G. Juretzek, et al.  
GERMAN, per, Neue Hutte, Vol 10, Apr. 1965, pp 193-199.  
BISI 4903

Thin Walled Steel Tubes Made Directly in a Combined Rotary Piercing and Planetary Mill, by F. Wiesner.  
GERMAN, per, Neue Hutte, Vol 10, Dec. 1965, pp 728-731.  
\*HG 6902

Recrystallisation Behaviour of a High Temperature Nickel Chromium Steel During Hot Working, by K. Skuin et al.  
GERMAN, per, Neue Hutte, Vol 11, 1966, pp 53-57.  
BISI 4846

The Effect of Additional Friction on Deformation Resistances, by J. Ludyga.  
GERMAN, rpt, Paper Presented at 28th Conference of the Association of European Roll Designers, Duisburg, 25.4.64.  
BISI 4831

Transverse and Longitudinal Cracks in Blooms of Basic OH Steel, by A. Schoberl.  
GERMAN, per, Radex Rund., Feb. 1966, pp 96-107.  
\*BISI 4944

Thread Manufacture by Thread Rolling, by E. Lickteig.  
GERMAN, per, Schrauben, Muttern, Formteile, Vol 51, Dec. 1965, pp 669-674, Vol 52, Jan. 1966, pp 39-44.  
BISI 4790

Investigations into the Welding of Spheroidal Graphite Cast Iron, by J. Ruge.  
GERMAN, per, Schweissen Schneiden, Vol 17, July 1965, pp 299-304.  
BISI 4872

Biological Dewaxing of Petroleum Products, by Marcus Grimberg.  
GERMAN, per, Seifen-Öle-Fette-Wachse, Vol XCI, No 20, 1965, pp 666-668  
\*ACSI J-0312  
ID 2204036566

Scientific  
Materials & Metallurgy (Contd)

Lubricants and Lubricant Carriers  
for [Cold] Drawing of Steel Wire,  
Part II, by W. Lueg, K. H. Treptow.  
GERMAN, per, Stahl und Eisen, Vol 17,  
No 17, Aug. 23, 1956, pp 1107-1116.  
HB 6846

The Finishing Shop in a Modern Rolling  
Mill, by H. Bucken, G. Branscheid.  
GERMAN, per, Stahl Eisen, Vol 84, May 7,  
1964, pp 625-632.  
BISI 4887

Action of Hydrogen and Other Gases on  
Steel at Elevated Temperatures,  
by I. Class.  
GERMAN, per, Stahl Eisen, Vol 85, Feb. 25,  
1965, pp 204-211.  
BISI 4834

Determination of the Grease Layer on  
Metallic Surfaces, Especially Tinplate,  
with Fat Soluble Fluorescent Materials,  
by G. von der Dunk.  
GERMAN, per, Stahl Eisen, Vol 85, June,  
1965, pp 799-804.  
BISI 4642

Behaviour as Regards Load Distribution  
of a Blooming Slabbing Mill with Modern  
Rotation Speed Control, by J. Heidepriem.  
GERMAN, per, Stahl Eisen, Vol 85, Aug. 26,  
1965, pp 1040-1046.  
\*BISI 4914

Investigation of the Dynamic Loading of  
Steelworks Crane Driving Gear by Universal  
Joints, by H. Overlach.  
GERMAN, per, Stahl Eisen, Vol 85, Oct. 7,  
1965, pp 1248-1257.  
\*BISI 4942

Sprayed Coatings of Steel and Non-Ferrous  
Metals and Testing of their Adhesion  
Strength, by A. Matting, H. D. Steffens.  
GERMAN, per, Stahl Eisen, Vol 85, Oct. 7,  
1965, pp 1257-1266  
BISI 4609

Scientific  
Materials & Metallurgy (Contd)

New Working Methods in the Open-Hearth  
Furnace by Using Oxy-Oil Burners,  
by M. Wahlster et al.  
GERMAN, per, Stahl Eisen, Vol 85, Nov. 4,  
1965, pp 1378-1387.  
\*BISI 4920

The Maintenance Department, by H. Wiegell.  
GERMAN, per, Stahl Eisen, Vol 85, Nov. 4,  
1965, pp 1441-1446.  
BISI 4801

Experience Gained Regarding Air Cooled  
Casting Ladle Stoppers, by H. Damoiseaux,  
K. Monreal.  
GERMAN, per, Stahl Eisen, Vol 85, Nov. 4,  
1965, pp 1479-1481.  
BISI 4817

The Pattern of Nitrogen, Silicon, and  
Sulfur Elimination and the Behavior of  
Titanium During the Pretreatment of  
Open-Hearth and Basic Bessemer Hot Metals  
With Soda, by H. P. Haastert, E. Kohler.  
GERMAN, per, Stahl und Eisen, Vol 85,  
No 24, 1965, pp 1588-1595.  
HB 6777

Present State of Knowledge on the Machina-  
bility of Steels, by F. Klaus et al.  
GERMAN, per, Stahl Eisen, Vol 85, Dec. 16,  
pp 1669-1686.  
BISI 4700

Automatic Slag Control in the Basic  
Oxygen Processes, by W. Dorr, N. Recknagel.  
GERMAN, per, Stahl und Eisen, Vol 85, No 25,  
Dec. 1965, pp 1686-1691.  
HB 6789

Study of the Production Conditions for Hot-  
Dip Galvanized Steel Wire With Zinc Coating  
as Thick and as Adherent as Possible,  
by H. Krautmacher, P. Funke.  
GERMAN, per, Stahl Eisen, Vol 85, Dec. 30,  
1965, pp 1713-1722.  
BISI 4789

Scientific  
Materials & Metallurgy (Contd)

Venturi and Radial Flow Washers for Cooling and Cleaning Impellent and Waste Gases, by W. von Jordan.  
GERMAN, per, Stahl Eisen, Vol 7, Apr. 1966, pp 399-406.  
\*BISI 4917

Economic Plant Management with the Aid of Standard Cost Accounting, by W. Scholler, H. G. Eckhold.  
GERMAN, per, Stahl Eisen, Vol 86, Jan. 13, 1966, pp 8-16.  
BISI 4788

Influence of Sulphide Formation on the Machinability of Free-Cutting Steels, by D. Radtke, D. Schreiber.  
GERMAN, per, Stahl Eisen, Vol 86, Jan. 27, 1966, pp 89-99.  
BISI 4775

Comparative Investigation into the Performance of Various Grades of Pellets and Sinter in the Blast Furnace, by H. Pohl, E. Tschierske.  
GERMAN, per, Stahl und Eisen, Vol 86, No 2, 1966, pp 74-76.  
HB 6827-II

The Importance of Measuring Technology for Automation in Iron and Steel Works, by H. Weineck.  
GERMAN, per, Stahl Eisen, Vol 86, Feb. 24, 1966 pp 189-200.  
BISI 4855

Modern Electro-Mechanical Weighing in an Oxygen Steelworks, by N. Breuninger, R. Buscher.  
GERMAN, per, Stahl Eisen, Vol 86, Feb. 24, 1966, pp 208-213.  
BISI 4819

Determination of the Torque in Rolling Strip, Taking Roll-Flattening into Account, by F. W. Hollmann, A. Troost.  
GERMAN, per, Stahl Eisen, Vol 86, Mar. 10, 1966, pp 278-284.  
BISI 4899

Scientific  
Materials & Metallurgy (Contd)

Throughput on Programmed Ingot Slab Trains, by J. Heidepriem.  
GERMAN, per, Stahl Eisen, Vol 86, Apr. 21, 1966, pp 465-472.  
\*BISI 4932

Requirements of d.c. Motors as Auxiliary Drives on Large Reversing Mill Trains, by K. Dobrich.  
GERMAN, per, Stahl Eisen, Vol 86, Apr. 21, 1966, pp 473-478.  
\*BISI 4933

Short-Time Tests for Determination of Susceptibility of High-Strength Constructional Steels to Long-Time Embrittlement, by A. Buttinghaus et al.  
GERMAN, per, Stahl Eisen, Vol 86, 1966, pp 542-547.  
\*BISI 4973

Determination of Hydrogen in Steelmaking Slags, by P. Dickens et al.  
GERMAN, per, Stahl Eisen, Vol 86, May 5, 1966, pp 548-552.  
\*HB 6878

The Development of the High-Strength Weldable Steels Used for Steel Structures; Their Use and Processing, by H. Adrian.  
GERMAN, per, Stahl Eisen, Vol 86, June 2, 1966, pp 645-662.  
\*BISI 4958

Investigations into the Influence of Particle Size on the Development of Coal Dust Explosions, by N. Helwig.  
GERMAN, per, Staub, Vol 26, No 2, 1966, pp 65-69.  
\*BISI 4938

Determining the Required Heights of Two Adjacent Chimneys, by G. Manier.  
GERMAN, per, Staub, Vol 26, Mar. 1966, pp 114-121.  
BISI 4921

Production of Ultrapure Steels in Electron-Beam Multichamber Furnace, Their Characteristics and Possibilities for Their Use, by Ch. Weiss and G. Scharf, 16 pp.  
GERMAN, per, Die Technik, No 5, May 1966, pp. 314-319.  
JPRS 36083

Scientific  
Materials & Metallurgy (Contd)

Testing Methods for Resistance Spot Welds,  
by K. Havers,  
GERMAN, per, Techn. Mitt., Vol 56, May 1963,  
pp 199-205.  
BISI 4818

Technique for the Separation of Super-  
imposed Damping Curves, by W. Janiche et al.  
GERMAN, per, Techn. Mitt. Krupp Forschungsber.,  
No 23, 1965, pp 146-156.  
BISI 4891

Bearing and Friction Materials Deposited  
by Powder Metallurgy, by H. Franssen.  
GERMAN, per, TZ. Prakt. Metallbearb., Vol 59,  
No 7, 1965, pp 454-458.  
BISI 4807

Forging in Enclosed Dies (Flash-Free  
Forging) an Evaluation of the Literature,  
by H. Meyer-Nolkenper.  
GERMAN, per, Werkstattstechnik, Vol 55,  
No 3, 1965 pp 398-403.  
HB 6754

Prevention of Corrosion in Oil Fired Boilers,  
by F. Glaubitz.  
GERMAN, per, Werks. Korros., Vol 16, Dec.  
1965, pp 1033-1039.  
\*BISI 4925

Study of Intercrystalline Grain-Boundary  
Corrosion of Austenitic Manganese-Chromium  
Steels by Water and Aqueous Solutions,  
by A. Baumel, O. Trampusch.  
GERMAN, per, Werks. Korros., Vol 17, Feb. 1966,  
pp 110-119.  
BISI 4873

Influence of the Impurities in the Technical  
Iron on the Notch-bar Toughness, by  
Gerhard Schmidt.  
GERMAN, per, Zeit fur das Eisenhüttenwesen,  
Vol VIII, No 8, 1934/35, pp 263-267.  
•Dept of Navy Tr /NRL

Notes on the Preparation of Sheet Structure  
Through Three Inverse Pole Shapes, by  
Hans-Joachim Bunge.  
GERMAN, per, Z. Metallkde, Vol 56, No 6, 1965,  
pp 378-379.  
\*AEC ORNL-tr-1287  
EDC 7/21/66

Scientific  
Materials & Metallurgy (Contd)

Stress-Relieving of Drawn Material by  
Stretching, Straightening and Annealing,  
by A. Peiter.  
GERMAN, per, Z. Metallk., Vol 57, Jan. 1966,  
pp 1-8.  
BISI 4836

Light Figures, Their Formation and Application  
for Determining the Orientation of Crystals,  
by H. Gengnagel.  
GERMAN, per, Z. Metallk., Vol 57, Apr. 1966,  
pp 281-287.  
\*BISI 4941

New Developments in High Speed Steel,  
by A. Randak, J. Kurzeja.  
GERMAN, per, Z. Fur Wirtschaftliche Fertigung,  
Apr. 1965, pp 131-136.  
BISI 4839

New Developments in the Field of High-  
Speed Steels, by A. Randak.  
GERMAN, per, Z. Wirtschaftl. Fertigung,  
May 1965, pp 205-210.  
\*BISI 4954

New Developments in the Field of High-Speed  
Steels, by A. Randak.  
GERMAN, per, Z. Wirtschaftl. Fertigung,  
June 1965, pp 269-273.  
\*BISI 4957

Centrifugal Pump, by Walter Mohle, 2 p.  
GERMAN, pat, Patent No 809,758.  
Dept of Comm  
Patent Office

Bored-pipi Clamp, Especially for Supply Lines  
Made of Synthetic Material, 7 p.  
GERMAN, pat, Patent No 1,090,903.  
Dept of Comm  
Patent Office

Magnetic Head with Ring Core Produced by Bend-  
ing a Sheet Metal Strip, 9 p.  
GERMAN, pat, Patent No 1,093,572.  
Dept of Comm  
Patent Office

Scientific  
Materials & Metallurgy (Contd)

Experimental Study of Manufacture of Cold-Headed and Thread Rolled Screws in Aisi 305 Stainless Steel, by G. Caprio. ITALIAN, rpt, Centro Inox, 1965, 20 pp. BISI 4842

Comparative Examination of the Effect of Small Additions of Cb and V to Semikilled Mild Steels, by P. Brozzo. ITALIAN, per, Met. Ital., Vol 47, No 10, 1965, pp 357-368. \*BISI 4972

Steels for Dies, by V. Cevoli. ITALIAN, per, Tranciatura Stampaggio, Vol 3, Feb. 1966, pp 1-11. \*BISI 4937

Clothespin, by Maurice Degee, 6 p. ITALIAN, pat, Patent No 436,225. Dept of Comm

Refining of Domestic Uranium Ores, by Hideo KINOSHITA. JAPANESE, rpt, FAPIG(Tokyo), No 32, Jun 1964, pp 106-110. 9233261 AEC NSJ-tr-57

Corrosion Studies on Reactor Materials by High-Temperature and High-Pressure Water Loop (II) Chemical Investigation of the Water in High-temperature and High-pressure Water Loop, by Hiroharu ITAMI, Sueo NOMURA, et al. JAPANESE, per, J. Atomic Energy Soc. Japan, Vol 7, No 1, Jan 1964, pp 15-24. 9233258 AEC NSJ-tr-61

Gas Chromatography of Phenol, by A. Uchida, S. Matsuda. JAPANESE, per, J. Chem. Soc. Japan, Vol 65, No 4, 1962, pp 574-477. BISI 4641

The Production of Stainless Steel Strip by Powder Rolling, by K. Tamura, T. Noda. JAPANESE, per, J. Jap. Soc. Powder and Powder Met., Vol 11, Oct. 1964, pp 236-242. BISI 4875

Scientific  
Materials & Metallurgy (Contd)

Effect of Exposed Time at Elevated Temperature on the Embrittlement of Welded Joints of HT60 Steel for Nuclear Pressure Vessels, by Michio INAGAKI, Isao OKANE, et al. JAPANESE, per, J. Japan Welding Soc, Vol 33, No 11, Nov 1964, pp 1010-1019. 9233259 AEC NSJ-tr-60

On the Finishing of Blade Edges by Electrolytic Polishing, by T. Kawakita. JAPANESE, per, Nippon Kinzoku, Vol 21, No 2, 1957, pp 96-99. \*BISI 4965

Measurement of Tritium at Natural Levels, by Tan TAKAHASHI. JAPANESE, per, Nuclear Engineering (Tokyo), Vol 10, No 2, Feb 1964, pp 65-68. 9233276 AEC NSJ-tr-49

Some Effects of Charge Size on Blast Furnace Operation, by T. Osuga, I. Kodama. Japanese, per, Tetsu to Hagane, Vol 41, Sept. 1955, pp 945-947. BISI 4655

Effect of Zirconium on Austenitic Grain Size in Iron and Steel, by A. Adachi. JAPANESE, per, Tetsu to Hagane, Vol 48, April 1962, pp 683-687. \*BISI 4963

The Relations Between Moisture Content and Preheating Temperature of the Coal Charge and Coke Quality, by H. Joh, et al. JAPANESE, per, Tetsu to Hagane, Vol 50, Sept. 1964, pp 1592-1594. BISI 4772

Automatic Gauge Control of Tandem Cold Strip Mills, by I. Kumo. JAPANESE, per, Tetsu to Hagane, Vol 50, No 12, 1964, pp 2056-2057. \*BISI 4974

Influence of Demagnetization on the Cleaning Effect of Steel Strip, by K. Suzuki. JAPANESE, per, Tetsu to Hagane, Vol 50, No 12, 1964, pp 2076-2078. \*BISI 4975

Scientific  
Materials & Metallurgy (Contd)

Spot and Seam Welding of Electrolytic Galvanized Steel Sheet, by T. Nishimura. JAPANESE, per, Tetsu to Hagane, Vol 50, No 12, 1964, pp 2080-2082.  
\*BISI 4976

The Diffusion and Solubility of Iron in Liquid Zinc, by M. Kato. JAPANESE, per, Tetsu to Hagane, Vol 50, No 12, 1964, pp 2083-2086.  
\*BISI 4977

The Effect of Oxygen Content on the Quality of Cold-Rolled Low-Carbon Rimmed Steel Sheet, by T. Saito et al. JAPANESE, per, Tetsu to Hagane, Vol 50, No 12, 1964, pp 2091-2092.  
\*BISI 4979

The Effect of Heating Rates on the Mechanical Properties of Cold-Rolled Steel Sheet, by M. Shimizu et al. JAPANESE, per, Tetsu to Hagane, Vol 50, No 12, 1964, pp 2097-2099.  
\*BISI 4980

Spectrographic Determination of Boron in Stainless Steel, by T. Kawaguchi, et al. JAPANESE, per, Tetsu to Hagane, Vol 50, Nov. 1964, pp 2205-2214.  
BISI 4666

Effect of Various Factors on the Manganese Content of the Metal Bath in the Basic Oxygen LD Process, by S. Hayashi, Sh. Ono. JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 732-735.  
HB 6744

Behavior of Sulfur in the Basic Oxygen Process when Blowing Dead-Soft Steel, by T. Araki, K. Yoshida. JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 735-737.  
HB 6745

Use of Lime with  $Fe_2O_3$  Additions in a Basic Oxygen LD Furnace, by Kazuo Nakabayashi et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 737-740.  
HB 6746

Scientific  
Materials & Metallurgy (Contd)

The Effect of Millscale on the Basic Oxygen LD Process, by Sh. Tamamoto, K. Iwase. JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 740-742.  
HB 6747

Manufacture of [Large] Carbon Steel Castings from Basic Oxygen LD Furnace Steel, by T. Yamaguchi et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 4, 1965, pp 743-744.  
HB 6748

Effect of Bath Motion on Splashing, [of Bath Oxygen Furnace Bath] Part II of 'A Study of Various Phenomena in Basic Oxygen LD Furnaces, Based on Room Temperature Models, by T. Simotsuma, K. Sano. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1909-1911.  
HB 6712

The Drop in Temperature Between the End Point of the Blow and the Tap in the Basic Oxygen LD Process, by Sh. Morita, H. Hirahata, JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1928-1930.  
HB 6716

Behavior of Deoxidation Products in the Deoxidation [of Steel] with Aluminum, Part I of 'Investigation into the Behavior of Deoxidation Products in Iron and Steel', by I. Uchiyama, T. Saito. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1956-1958.  
HB 6890

Deoxidation of Iron-Carbon Alloys With Cerium and the Resulting Nonmetallic Inclusions, by T. Kusakawa, Y. Watanabe. JAPANESE, per, Tetsu to Hagane, Vol 51, No 10, 1965, pp 1970-1973.  
HB 6669

Thermodynamic Behavior of Columbium Carbide, Carbonitride, Nitride and Sulfide in Steel, by T. Mori et al. JAPANESE, per, Tetsu to Hagane, Vol 51, No 11, 1965, pp 2031-2033.  
HB 6899

Scientific  
Materials & Metallurgy (Contd)

Annealing Trials on Steel Wire in Various Furnace Atmospheres, by W. Schwensfeier and O. Pawelski. GERMAN, per, Stahl und Eisen, Vol 85, No 21, 1965, pp 1320-1327. HB 6839

Thermal Characteristics of a Pebble-Bed Heater, by M. Hayasi. JAPANESE, rpt, Tokyo, Tr 52, 1963, pp 1-15. \*NAGA TT P-10,188

Coal-Oil Slurry Injection into Blast Furnace, by K. Morinaga et al. JAPANESE, per, Tetsu to Hagane, Vol 52, No 2, 1966, pp 107-113. \*HB 5891

Copper and Brass-Infiltrated Sintered Iron Powders, by St. Stolarz. POLISH, per, Hutnik, No 3, 1966, pp 87-95. \*HB 6896

Non-Destructive Method for Determining the Strength of Cellular Concrete, by S. Rybicki. POLISH, per, Inzynieria i Budownictwo, No 9, 1961, pp 370-372. NLL Ref: 5196 1965 (1251)

Some Steelmaking Applications of Investigations of Non-Metallic Inclusions, by J. Foryst. POLISH, per, Prace Inst. Hutn., Vol 17, No 2/4, 1965, pp 219-223. BISI 4824

Phenomenon of Sulphur Passing From the Blacking into the Cast Iron, by K. Mazanek. POLISH, per, Prace Instytutu Odlewnictwa, No 1-2, 1964, pp 75-97. \*BISI 4971

Desulfurization of Open-Hearth Pig Iron Outside the Blast Furnace, by L. Krol, J. Rys. POLISH, per, Prace Rady Naukowo-Technicznej Hutn., No 14, 1964, pp 3-12. HB 6674

Scientific  
Materials & Metallurgy (Contd)

Continuous Steelmaking, by Prof. Sven Eketorp. SWEDISH, per, Teknisk Tidskrift, Vol 94, No 45, 1964, pp 1229-1232. HB 6815

Uranium Deposits in Yugoslavia, by Prof. Dr. Engr. Slobodan Jankovic, 26 pp. SERBO-CROATIAN, per, Rudarski glasnik, No 1, Jan 1966, pp. 63-78. JPRS 36238

Molybdenum Deposits in Yugoslavia, by Prof. Dr. Engr Slobodan Jankovic, 13 pp. SERBO-CROATIAN, per, Rudarski glasnik, No 1, Jan 1966, pp. 55-62. JPRS 36238

Effect of Silicon Content on the Mechanical and Physical Properties and the Fine Crystal Structure of Silicon Steels Subjected to High Temperature Ausforming, by N. Sassu. RUMANIAN, per, Studii Cerc. Met., Vol 10, No 1, 1965, pp 31-48. \*BISI 4959

Effect of High-Temperature Thermomechanical Treatment on the Mechanical Properties, Microstructure and Fine Crystal Structure of Silicon Steels, by N. Sassu. RUMANIAN, per, Studii Cerc. Met., Vol 9, No 2, 1964, pp 161-177. \*BISI 4936

Considerations on the E.S.R. Process, by I. Tripsa. RUMANIAN, per, Cerc. Met., Vol 7, 1965, pp 105-120. \*BISI 4983

The Possibilities of Applying a New Process of Steel Melting From Scrap in Poland, by S. Soltan. POLISH, per, Problemy Projektowe, Vol 13, Feb. 1965, pp 37-40. BISI 4896

Scientific  
Mathematics & Data Processing

Telemetry Apparatus with Digital Reading  
by Ivan Ivanovich Mikhaylov.  
RUSSIAN, bk, Apparatura Teleizmereniya S  
Tsifrovym Otschetom, 1964, pp 1-123.  
\*FTD-MT-66-68

Complete Radial Variation of One Class of Har-  
monic Functions, by V. S. Zakharyan and E. O.  
Nazaryan,  
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol  
XLI, NR 2, 1965, pp 65-72.  
ACIC TC-1073

Simultaneous Approximation of Certain Functions  
by Polynomials and Derivatives, by Ye. Sh. Chat-  
skaya,  
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol  
XLI, No 3, 1965, pp 129-136.  
\*ACIC TC-1074

Electronic Computers, by L. N. Korolev and  
V. M. Bryabrin, 52 pp.  
RUSSIAN, per, Elektronnyye Vychislitel'nyye  
Mashiny, 1965, pp. 1-87.  
JPRS 35972

Production Control by Computers, by V. S.  
Kazakovtsev.  
RUSSIAN, bk, Instrument Upravleniya, 1965,  
92 pp.  
NLL R 39763

Mathematical Description of Items for  
Automation, by V. M. Ordyn'tsev.  
RUSSIAN, bk, Matematicheskoe Opisanie  
Ob'ektov Avtomatizatsii, 1965, 360 pp.  
NLL R. 39805

An Approximation Process Related to Legendre  
Polynomials, by I. K. Daugavet,  
RUSSIAN, per, Metody Vychisleniy, No 2, 1963,  
pp 29-38.  
\*ACIC TC-1075

Character Recognition: Theory of Data  
Transmission, by B. L. Blokh.  
RUSSIAN, bk, Opisanie Obrazov: Teoriya  
Peredachi Informatsii, 1965, 151 pp.  
NLL R 39674

Scientific  
Mathematics & Data Processing (Contd)

Concerning the Invertibility of the Lyapunov's  
Theorem of Asymptotic Stability, by I. G. Malkin,  
13 p.  
RUSSIAN, per, Prikladnaya Matematika i Mekhanika,  
Vol XVIII, 1954, pp 129-138. 9700469  
RSIC-526

Integro-Differential Equations of a Problem for  
Equilibrium of Shells of Rotation of Variable  
Thickness, by G. I. Tkachuk. 10 pp.

RUSSIAN, per, Prikladnaya Mekhanika, Vol 7, No 3,  
1961, pp 266-271. 9700949  
FTD-TT-65-1378

Use of Computers for Calculating Radiation-  
Induced Disturbances in Metals, A. N. Orlov.  
RUSSIAN, rpt, Primeneniye Elektronnykh  
Vychislitel'nykh Mashin Dlya Rascheta  
Radiatsionnykh Vozmushcheniy v Metallakh  
Deystvie Yadernykh Izлучeniy na Materialy.  
Moskva, 1962, pp 288-293.  
\*FTD-MT-66-433

The Application of a Digital Computer for  
Approximation of Discrete Fields, by V. A.  
Rozhkov, V. N. Vasil'yev, 16 pp.  
RUSSIAN, per, Trudy Gosudarstvennogo okeano-  
graficheskogo instituta, Vol XXCVI, 1965,  
pp. 112-123.  
JPRS 36255

Stability of Solutions of Stochastic  
Differential Equations, by I. I. Gikhman,  
A. Ya. Dorogovtsev.  
RUSSIAN, per, Ukrainskii Matematicheskii  
Zhurnal, Vol XVII, No 6, 1965, pp 3-12.  
\*Dept of Navy/APL/JHU No 834

Conditions of Asymptotic Stability in the Case of  
Unstable Motion and an Evaluation of the Rate of  
Decrease of the General Solution, by V. I. Zubov,  
36 p.  
RUSSIAN, per, Vestnik Leningradskogo Universiteta,  
No 1, 1957, pp 110-129. 9700471  
RSIC-529

Representation of Continuous Functions  
of Two Variables with the Aid of Continuous  
Functions of One Variable, by  
L. A. Bassalygo.  
RUSSIAN, per, Vestn Moskovsk Univ Matematika,  
No 1, 1966, pp 58-63.  
\*Dept of Navy/APL/JHU No 835

Scientific  
Mathematics & Data Processing (Contd)

Automation of Card Punching, by D. Zhak and V. Meshcheretova, 8 pp.  
RUSSIAN, per, Vestnik Statistiki, No 3, Mar 1966, pp. 75-82.  
JPRS 36030

The Problems of Irregular Three-Dimensional Density of Surface Separations, by Hsu-yun, CHINESE, per, Ti Ch'iu Wu li Hsueh Pao, Vol XIV, No 1, 1965, pp 35-66.  
ACIC TC-992

On the Quasi-Stokes' Form of N. Noisseyev's Integral Equation for the Unregulated Geoid, by B. Saltykov, FRENCH, per, Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, Vol XVI, No 3, 1937, pp 138-140.  
ACIC TC-1053

On the Solution of N. Noisseyev's Integral Equation in the Theory of the Unregulated Figure of Geoid, by V. Saltykov, FRENCH, per, Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, Vol XVI, No 8, 1937, pp 133-137.  
ACIC TC-1052

Calculator, by Jules Arnault and Louis Paineau, 13 p.  
FRENCH, pat, Patent No 516,480.  
Dept of Comm  
Patent Office

Mathematical Classification Models in Pattern Recognition Problems, by Stanislaw Schmidt, POLISH, per, Archiwum Automatyki i Telomechaniki, Vol IX, No 4, 1964, pp 427-442.  
\*FTD-HT-66-445

Stress State Near a Rectangular Opening With Curved Angles in a Cylindrical Shell by O. N. Guz, S. G. Golorod'ko, 8 pp.  
UKRAINIAN, per, Prykladna Mekhanika, Vol X, No 6, pp 594-599, 1964.  
Dept of Navy Tr 4732/Bureau of Ships Tr No 983

Scientific  
Nuclear Sciences & Technology

Catalog of the Instruments Using Nuclear Sources and Utilized for Controlling and Automation of Technical Processes, Produced by the All-Union Group "Isotope", 1965.  
RUSSIAN, bk, Moscow, 1965, 58 pp. 9233074-V  
AEC-Tr-6699

Global Fallout Products of Nuclear Explosions, by V. N. Lavrenchik, 170 pp.  
RUSSIAN, bk, Moscow, 1965, 170 pp. 9233075-V  
AEC-Tr-6666

Multi-Photon Ionization CF Atoms and Molecules in a Strong Electromagnetic Wave Field, by G. S. Voronov, 10 pp.  
RUSSIAN, rpt, Moscow, 1965, pp 1-14.  
9233094  
AEC NP-TR-1380

The Reactions  $He^3(d, t)2p$  And  $He^3(He^3, \alpha)2p$ , by K. P. Artemov, V. Z. Gol'dberg, 6 pp.  
RUSSIAN, rpt, 1964. 9233085  
AEC-TR-6706

Water Purification and Water Preparation for Nuclear Reactors. Communication II, by E. S. Chmurotov, N. V. Potekhin, 11 pp.  
RUSSIAN, rpt, 1964. 9233084  
AEC-TR-6703

Water Purification and Treatment for Nuclear Research Reactors, by B. A. Alekseyev, E. B. Babulevich, 13 pp.  
RUSSIAN, rpt, pp 95-117. 9233090  
AEC WAPD-TR-26

Investigation of Excited States of  $Mh^{104}$ ,  $104^+$  by the  $\gamma$ -Radiation From the  $(MY)$ -Reaction, by O. I. Sumbayev, V. L. Alekseyev, 29 pp.  
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Fiz, Vol XXIX, 1965, pp 739-759. 9233093  
AEC ANL-TR-303

Gas-Discharge Sources of Ions and Atoms With a Glowing Cathode, by O. V. Kozlov, Yu. A. Skoblo.  
RUSSIAN, per, Iz Vysah Ucheb Zaved, No 2, 1965, pp 87-91.  
\*FTD-HT-66-318

Study of Transient Neutron Spectra in Zirconium Hydrate, by S. N. Ishmaev, V. I. Mostovoi.  
RUSSIAN, rpt, OKAE, Institut Atomnoi Energii im. I. V. Kurchatova, Moscow, 1965, 19 pp.  
\*AEC

Scientific  
Nuclear Sciences & Technology (Contd)

Demineralization of Salt Water: A Method of Distillation Employing Heat From Atomic Reactors, by E. D. Mat'tsev. RUSSIAN, bk, Opresnenie Solenyykh Vod: Metod Distillyatsii s Ispol'zovaniem Tepla Yadernykh Reaktorov, 1965, 84 pp. NLL R 39852

Polymer Coatings in Nuclear Engineering, by V. B. Tikhomirov. RUSSIAN, bk, Polimernye Pokrytiya v Atomnoi Tekhnike, 1965, 276 pp. NLL R 39789

Reconstruction of Research Reactor IRT at Atomic Energy Institute imeni I.V. Kurchatov, by V. V. Gencharov, Yu. F. Chernilin, et al. RUSSIAN, rpt, Rekonstruktziya Reaktora IRT v IAE im. I.V. Kurchatova, Report IAE-992, 25 pp. \*AEC

The Effect of Ultraviolet Radiation on the Amount of Nucleic Acid in Paramecium Caudatum, by K. A. Samoilova, et al. RUSSIAN, per, Sbornik Rabot Tsitol Ak Nauk SSSR, No 3, 1963, pp 145-153. \*AEC-ORNL-Tr-1289

Outlook for the Introduction of Radioactive Den-simeters of Liquid into the Industry of Organic Synthesis, by N.A. Veksler, K.S. Furman, et al. 10 pp. RUSSIAN, per, Trudy. Vsesoyuznogo Soveshchaniya, Radioaktivnyye Izotopy i Yadernyye Izlucheniya v Narodnom Khozyaystve SSSR, 12-16 Apr 1960, 1961, pp 257-262. 9700963 FTD-TT-65-1448

Effect of Reactor Radiation on Performance of Cesium Diode, by F. V. Kondrat'yev, G. V. Sinyutin, et al, 8 pp. RUSSIAN, rpt, Vliyanie Izlucheniya Reaktora na Raboty Tossievogo Dioda, Report IAE-949. \*AEC

The Planning of n-p Scattering Experiments for Determining the Most Probable set of Phase Shifts, by F. Lehar, V. V. Fedorov. RUSSIAN, per, Yadernaya Fizika, 1965. AEC AERE tr 1047

Nuclear Physics, I-Hsi Cheng. CHINESE, bk, Yuan-Tzu Wu-li-Hsueh, 2nd Edition, 1965, pp 205-214. \*FTD-HT-66-421

Scientific  
Nuclear Sciences & Technology (Contd)

Prospects of Development of Nuclear Power in Yugoslavia, by S. Suica. CROATIAN, per, Nuklearna Energija, Vol 2, No 1, 1965, pp 1-7. NLL Ref: 9091.9F 1965 (Risley Tr. 910)

"Duro Dakovic" Work on Nuclear Power Station Equipment, by D. Peretic. CROATIAN, per, Nuklearna Energija, Vol 2, No 1, 1965, pp 20-21. NLL Ref: 9091.9F 1965 (Risley Tr. 911)

Application of a Proportional Counter to Some Particular Cases of a Measurements, by Janine Ferret, Marie-Therese Gasc, 13 pp. FRENCH, rpt, CEA-R 2765. 9233097 AEC RFP-Tr-13

Detection of Fission Fragments by Secondary Emission, by Arlette Audias. FRENCH, rpt, Detection des Fragments de Fission par Emission Secondaire, Report CEA-R-2862. \*AEC-ORNL-Tr-1285

CaF<sub>2</sub> As a Model Substance for Diffusion Processes in UO<sub>2</sub>, by H. Matzke, 7 pp. FRENCH, per, Journal Nuclear Materials, Vol XI, 1964, pp 344-347. 9233100 AEC NP-TR-1381

Nuclear Fusion. (Translated Selected Articles). FRENCH, rpt, Nuclear Fusion, Vol V, No 1, 1965. 9233082-V AEC-Tr-6669

Nuclear Power Plant. FRENCH, Patent No. 1,382,728. \*AEC ORNL-tr-1309 EDC 8/11/66

Dose Rate and Maxium Permissible Flux of High Energy Electrons and Gamma Rays, by K. Tesch, GERMAN, rpt, Dosisleistung und Toleranzfluss Hochenergetischer Elektronen und Gammastrahlen Dosy-St-1 (1965), \*AEC-ORNL-Tr-1250

Scientific  
Nuclear Sciences & Technology (Contd)

Hungarian Scientist Reports on His Studies in Nuclear Chemistry at Warsaw University, by Mrs. Richard Danoczy, 5 pp.  
HUNGARIAN, per, A Magyar Tudományok Akadémia  
Kemiai Tudományok Osztályának Közleményei,  
Vol 25, No 3, 1966, pp. 310-312.  
JPRS 36026

Dissolution of Fuel-Element Jackets of Aluminum and S.A.P. in a Recirculating Dissolver, by G. Beone, 41 pp.  
ITALIAN, per, Comitato Nazionale Energia Nucleare, 1965. 9233088  
AEC ORNL-TR-1247

UC-ZrC (NbC) as a Reactor Fuel Material, by Kazuo YAMAMOTO.  
JAPANESE, per, J. Atomic Energy Soc. Japan,  
Vol 6, No 4, Apr 1964, pp 197-205. 9233266  
AEC NSJ-tr-41

Radiation Induced Liquid Phase Oxidation of Cumene, by Yoshida Kenzo, Kawakami Waichiro.  
JAPANESE, rpt, JAERI-1100. Dec 1965, 10 pp.  
\*AEC

Significance of Nuclear Tests and Rectification, by Atsuyoshi Niijima, 12 pp.  
JAPANESE, per, Ekonomisto, 31 May 1966, pp. 22-28.  
JPRS 36230

On the Geochemical Studies of Stable Isotopes (III) on the Estimation of the Isotope Ratio in the Mantle, by Nakoto SHIMA.  
JAPANESE, rpt, Mass Spectroscopy (Tokyo), Vol 12,  
No 25, May 1964, pp 17-20. 9233275  
AEC NSJ-tr-48

Fission Gas Diffusion Loop in Japan Atomic Energy Research Institute, by Seishi YAJIMA, et al.  
JAPANESE, per, Nippon Genshiryoku Gakkaishi,  
Vol 8, No 1, 1966, pp 3-11.  
\*AEC ORNL-tr-1313  
EDC 8/11/66

Activation Analysis of Short Life Nuclides: II, by Nakai, 7 pp.  
JAPANESE, per, Nippon Kagaku Zasshi,  
Vol LXXXI, 1960, pp 104-107.  
ACSI J-0123  
ID 2204031466

Scientific  
Nuclear Sciences & Technology (Contd)

Removal of <sup>137</sup>Cs on a Niigata Montmorillonite Clay by Column Technique, by Masao TAKIZAWA, Kugao KODA, et al.  
JAPANESE, per, Radioisotopes (Tokyo), Vol 13,  
No 6, Nov 1964, pp 455-461. 9233260  
AEC NSJ-tr-58

A Whole Body Counter Employing Eight Units of Plastic Scintillation Detectors (1)  $\gamma$ -Ray Performance of a Plastic Scintillation Detector Unit, by Takeshi A. IINUMA, Norimasa NOHARA  
JAPANESE, per, Radioisotopes (Tokyo), Vol 14,  
No 1, Jan 1965, pp 1-7. 9231511  
AEC NSJ-tr-59

Report on an Investigation of the Present Utilization of Radioisotope Devices.  
JAPANESE, per, Radioisotopes, Vol 14, No 3,  
1965, pp 255-267. 9233254  
AEC AERE-tr 1048

Observations of Fall-out in Tokyo (II) Determination of Sr-90 and Cs-137 in Rain Water, Vegetables and Soils in Miyake-jima, by Hamaji SUZUKI, Nobuo ITO, et al.  
JAPANESE, rpt, Tokyo Metropolitan Isotope Centre,  
Ann. Rpt, No 2, pp 87-91, 1963. 9233273  
AEC NSJ-tr-54

The Operating Experience of the Ion Exchange Filter for the BWA Reactor, by Z. Begushevskiy, K. Karnovetskiy, 10 pp.  
POLISH, rpt. 9233092  
AEC WAPD-TR-27

Scientific  
Physics

Fundamentals for the Analytical  
Mechanics of Shells, by N. A. Kil'chevskiy.  
RUSSIAN, bk, 1965, 360 pp.  
NLL

Aerodynamics of Rarefied Gases (Collection I)  
341 pp.  
RUSSIAN, bk, Aerodinamika Razrezhenykh Gazov,  
Sbornik I, 1963, pp 1-268. 9700920-V  
FTD-MT-64-293

Convective Heat and Mass Transfer in the  
Combustion of Chemically Active Substances  
in the Boundary Layer on a Porous Surface,  
by A. L. Batiyevskiy, A. L. Mosse.  
RUSSIAN, bk, Akad Nauk Belorusskoy SSR,  
Institut Teplo- i Massoobmena. Teplo- i  
Massoobmen tel s Okruzhayushchev Gazovoy  
Sredoy, 1965, pp 168-175.  
ATD 66-26

Determination of Thermal Properties of  
Materials as Functions of Temperature,  
by G. A. Surkov.  
RUSSIAN, per, Dokl Ak Nauk BSSR, Vol X,  
No 1, 1966, pp 22-25.  
\*NASA TT F-10,187

Investigation of Plasma by the Method of Probing  
With Beams of Fast Particles, by L. I. Krupnik,  
N. G. Shulika. 19 pp.  
RUSSIAN, rpt, Doklad. Predstavienny Na VI Mez-  
hdunarodnyy Simpozium Po Ionizatsionny Yav-  
leniyam V Gazakh, Parizh, Iyul', 1963,  
pp 1-25. 9700946  
FTD-MT-65-101

Experimental Investigations of Distribution  
Functions of Point Monodirected Sources With  
Initial  $\gamma$ -Quanta Energy of 0.661 and 1.25 Mev  
in Concrete, Aluminum, Iron, and Lead, by  
L. R. Kimel, A. M. Panchenko, et al. 27 pp.  
RUSSIAN, per, Inzhenerno-Fizicheskiy Institut  
(Russian), No 2, 1963, pp 28-39. 9700918  
FTD-MT-65-30

The Spectral-Angular Distribution of  $\gamma$ -Radi-  
ation from the Surface of a Half-Medium With  
Evenly Distributed Isotropic Sources, by  
V. V. Pavlov. 27 pp.  
RUSSIAN, per, Inzhenerno-Fizicheskiy Institut  
(Russian), No 2, 1963, pp 66-77. 9700918  
FTD-MT-65-30

Scientific  
Physics (Contd)

The Phenomenon of Dimerization of Alkali Metals  
and Calculation of Their Thermophysical Prop-  
erties to a Temperature of 1500° C, by  
L. D. Volyak,  
RUSSIAN, per, Inzh Fiz Zhurnal, Vol V, No 3,  
1962, pp 51-58.  
\*NASA TT F-10,159

Calculation of the State of Products of Explo-  
sion by the Method of MEasurement of Parameters  
of Shock, by L.N. Pyatnitskiy, O.A. Tsukhanova.  
13 pp.  
RUSSIAN, per, Inzhenerno-Fizicheskiy Zhurnal,  
Vol 5, No 5, 1962, pp 21-29. 9700937  
FTD-MT-65-183

Study of the Transition of a Turbulent  
Boundary Layer into a Laminar One,  
by M. E. Deich, L. Ya. Lazarev.  
RUSSIAN, per, Inzhenerno-Fizicheskiy  
Zhurnal, Vol VII, No 4, 1964,  
pp 18-24.  
Dept of Navy Tr 4744/APL/JHU TG 230-T470

Representation of the Equation of  
State of a Real Gas by Elementary  
Functions and Methods of Their  
Determination, by Ya. Z. Kazavchinskiy.  
RUSSIAN, per, Inzh Fiz Zhur, Vol VII, No 6,  
1964, pp 129-134.  
NASA TT F-10,078

Calculation of the Main Portion of an Axially  
Symmetric Turbulent Stream of a Real Gas, by  
V. I. Bakulev. 21 pp.  
RUSSIAN, per, Inzhenerno-Fizicheskiy Zhurnal,  
Vol 7, No 10, 1964, pp 14-20. 9700945  
FTD-MT-65-185

Flame Propagation in Laminar and Turbulent Flows,  
by A. P. Kovalev, A.S. Ippolitov, et al. 21 pp.  
RUSSIAN, per, Inzhenerno-Fizicheskiy Zhurnal  
Vol 7, No 11, 1964, pp 28-36. 9700945  
FTD-MT-65-185

Experimental Investigation of Heat and  
Mass Transfer in the Condensation of  
Water Vapour from Moist Air on a Vertical  
Surface under Natural Convection Conditions,  
by P. M. Srdlik.  
RUSSIAN, per, Inzhenerno-Fizicheskiy  
Zhurnal, Vol 8, No 2, 1965, pp 243-246.  
NLL RTS 3066

Scientific  
Physics (Contd)

Buckling and Steady Flutter of Heat-Compressed Panels in a Supersonic Flow, by V. V. Bolotin. RUSSIAN, per, Inzh Zhur, Vol I, No 2, 1961, pp 82-96  
NASA TT F-10,106

Calculation of an Axisymmetrical Supersonic Jet Discharging Into a Supersonic Wake Stream or a Still Medium, by V. M. Emel'yanov. RUSSIAN, per, Inzhenernyi Zhurnal, Vol V, No 3, 1965, pp 545-548.  
Dept of Navy Tr 4748/APL/JHU T-1820

Elastic Vibrations of a Cylindrical Shell Filled with Liquid, by I. Ye. Shashkov. RUSSIAN, per, Inzhenernyi Zhurnal, Vol 5, No 3, 1965, pp 575-579.  
ATD 66-16

Flow Past Slender Sharp Cones in a Viscous Hypersonic Gas Stream, by V. N. Gusev. T. V. Klimova. et al. RUSSIAN, per, Inzhenernyi Zhurnal, Vol V, No 3, 1966, pp 416-424.  
Dept of Navy Tr 4746/APL/JHU T 1796

Design of Heat Exchangers with Internal Heat Sources and Heat Sinks, by Yu. I. Danilov, B. M. Galitseyskiy. RUSSIAN, bk, Issledovaniye Teploobmena v Potokakh Zhidkosti i Gaza, 1965, pp 126-136.  
\*FTD-HT-66-428

Fundamentals of the Analytical Mechanics of Shells, by N. A. Kil'chevskiy. RUSSIAN, per, Izd. Ak. Nauk Ukr. SSSR, 1963, NLL Ref: 6015.49F 1965 (292)

Emissivity of a Pinnacled Surface. Investigation of an Emissive, Pintube System, by Yu. G. Zhulev. Yu. A. Vasanov. RUSSIAN, rpt, Izuchatel'naya Spособnost' Zubchatoy Poverkhnosti, Issledovaniye Izuchatel'noy Sistemy s Orebrennyy Trubkay, 1965.  
NASA TT F-10,134

Scientific  
Physics (Contd)

Determination of the Overall Error in Measuring Temperature With an Optical Pyrometer, by D. M. Shakhtin, E. V. Levintovich, et al. RUSSIAN, per, Izmeritel'naya Tekhnika, No 12, 1965, p 69.  
Dept of Navy Tr 4750/APL/JHU T-1822

On Refining the Classical Flexure Theory of Anisotropic Plates, by L. A. Agalovyan. 17 pp. RUSSIAN, per, Iz Ak Nauk Armyansky SSR Ser Fiziki Matematicheskikh Nauk, Vol XVIII, No 5, 1965, pp 16-30.  
ACSI 1-9326  
ID 2204014166

On the Theory of Raman Scattering of Light by a Molecule, by K. Rebane, T. Rebane. 15 pp. RUSSIAN, per, Izvestiya Ak Nauk EstSSR. Seriya Fiziko-Matematicheskikh i Tekhnicheskikh Nauk, Vol 12, No 3, 1963, pp 227-237. 9700938  
FTD-MT-65-225

Oxide Films on Silicon, by V. A. Arslambekov. RUSSIAN, per, Iz Ak Nauk SSSR, Neor Material, Vol II, No 2, 1966, pp 217-222.  
\*AEC

Ion Source With Longitudinal Magnetic Field, by S. V. Starodubtsev, V. A. Muminov. 5 pp. RUSSIAN, per, Izvestiya. AN UZSSR. Seriya-Fiziko-Matematicheskikh Nauk, No 1, 1965, pp 57-59. 9700951  
FTD-TT-65-1474

Contributions to the Theory of Adsorption Effect at the Surfaces of Semiconductors and Gels Under the Action of Ionizing Radiation, by D. A. Aronov, et al. RUSSIAN, per, Izv ak Nauk Uzbeksk SSR, Ser Fizmat Nauk, Vol IX, No 5, 1965, pp 63-70  
\*NASA TT F-10,137

Determining the Temperature Field of Turbine Blades with Longitudinal Air Cooling on the Basis of Asymptotic Methods of Analysis, by I. S. Lyubchenko. RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy Aviatsionnaya Tekhnika, No 3, 1965, pp 98-107.  
ATD 66-51

Scientific  
Physics (Contd)

Detection of the Rapid Halation of Photoionization and the Cloud of Concentrated Long-Life Ionization Resulting from the Shock Wave of a Spark in a Laser Beam, by G. A. Askar'yan, M. S. Rabinovich, et al. 3 pp.  
RUSSIAN, per, Journal of Experimental and Theoretical Physics, Vol I, No 6, 1965, pp 18-23. 9700808  
Dept of Navy/ONI Tr No 2145

Formation of the Flow Upstream of a C Shock Wave Expelled From a Nozzle, by A. I. Starshinov.  
RUSSIAN, per, Leningrad Univ Vestn Ser Mat Mekhan i Astron, Vol XIII, No 3, 1965, pp 125-127.  
Dept of Navy Tr 4743/APL/JHU TG 230-T469

Linear Theory of Shells. Part I. General Theory(1962) 274 pp. Part II. Certain Theoretical Problems, by K. F. Chernykh.  
RUSSIAN, rpt, Lineynaya Teoriya Obolochek, 1964, 395 p.  
\*NASA TT F-441

Papers of the 4th Ural Conference on Spectroscopy, by G. P. Skorniyakov et al.  
RUSSIAN, bk, Materiialy Chetvertogo Ural'skogo Soveshchaniya po Spektroskopii, 1965, 263 pp.  
NLL R. 39764

Charges With Air Spaces and Highly Dispersed Granular Explosives as Means of Controlling Blast Effect, by L. N. Marchenko, G. P. Demidyuk, 10 pp.  
RUSSIAN, per, Nauch Soob IGD, Vol XXIV, 1965, pp 22-31. 9700902  
Dept of Navy/ONI Tr No 2199

Three-Dimensional Flow of Ideal Gas Past Smooth Bodies, by K. I. Babenko, et al.  
RUSSIAN, rpt, Prostranstvennoye Obtekanie Gladkikh Tel Ideal'nyy Gazom, 1964.  
NASA TT F-380

Non Linear Theory of Elasticity and Stability in the Case of Large Deflections, by V. V. Bolotin.  
RUSSIAN, per, Raschety Na Prochnost, No 3, 1958, pp 310-354.  
NLL RTS 3024

Scientific  
Physics (Contd)

Epitaxial Growth of Germanium Films from Supercooled Droplets, by N. N. Sheftal, RUSSIAN, bk, Rost Kristallov Ak Nauk SSSR, Inst Kristallografi, No 4, 1964, pp 14-21.  
\*FTD-HT-66-435

Polarography as a Method of Studing Tautometry of Organic Compounds, by Yu. P. Kitayev.  
RUSSIAN, rpt, Teoriya i Praktika Polyarograficheskogo Analiza, Materialy Pervogo Vsesoyuznogo Soveshchaniya po Polyarograficheskomu Analizu Akademiy Nauk, 1962, pp 88-93.  
ACSI Y-9692.  
ID 2204025566

Polarographic Study of Stereoisomeric Changes of Some Semi- and Thiosemi-Carbozones in Solutions, by G. K. Budnikov.  
RUSSIAN, rpt, Teoriya i Praktika Polyarograficheskogo Analiza, Materialy Pervogo Vsesoyuznogo Soveshchaniya po Polyarograficheskomu Analizu Akademiy Nauk, 1962, pp 395-398.  
ACSI Y-9692  
ID 2204025566

Heat Transfer to Liquids Boiling in Pipes and During Bulk Boiling, by I. T. Aladiev, 12 p.  
RUSSIAN, per, Teplotenergetika, Vol X, 1963, pp 57-61. 9700470  
RSIC-530

Application of Characteristics Method to Numerical Solution of Unidimensional Problems in Gas Dynamics, by A. I. Zhukov.  
RUSSIAN, per, Trudy Mat Inst Ak Nauk SSSR, No 58, 1960, 149 pp.  
\*NASA TT F-298

Parabolic Reflector With Screens, by V. V. Vitkevich, P. D. Kalachev.  
RUSSIAN, per, Trudy of the P. N. Lebedev Physics Institute, Radioteleskopy, Vol XXVIII, 1965, pp 46-50.  
\*ACSI J-0328  
ID 2204037366

Scientific  
Physics (Contd)

Investigation of Effect of Interstitial Impurities on the Structure and Properties of Tungsten Single Crystals, by Ya. M. Savitski, G. L. Tsarov. RUSSIAN, per, Vesti Ak Nauk SSSR Ser Fiz. Tekhn Nauk, No 2, 1965, pp 84-91.  
\*NASA TT F-10,157

Soviet Nonlinear Laser Work, by N. V. Karlov. RUSSIAN, per, Vesti Ak Nauk SSSR, No 8, 1965, pp 82-84.  
\*FTD-HT-66-458

Use of the Method of "Extraction Sections" for the Computation of Shielding Not Containing Hydrogen, by D. L. Broder, et al. RUSSIAN, rpt, Voprosy Fiziki Zashchity Reaktorov, 1963, pp 52-60.  
\*NASA TT F-10,155

The Mechanism of Action of Explosion and Properties of Explosives, by G. P. Demiduk, 27 pp. RUSSIAN, per, Vzryvnoye Delo, Symposium 45/2. 9700725  
Dept of Navy/ONI Tr No 1063

Kinetic Description of a Rarefied Fully Ionized Plasma, by A. M. Dyukalov. RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 6, 1964, pp 39-49.  
\*FTD-HT-66-399

Theory of Pulse Discharges in a Liquid Medium, by V. V. Arsent'yev. RUSSIAN, per, Zh Prik Mekh i Tekh Fiz, No 5, 1965, pp 51-57.  
\*NASA TT F-10,147

Fabry-Perot Interferometer in the Microwave Region of the Spectrum and Its Use for Plasma Diagnostics, by Balakhanov, Striganov, 11 pp. RUSSIAN, per, Zhur Prikladnoy Spektroskopii Ak Nauk Belorusskoy SSR, Vol III, No 4, 1965, pp 311-319. 9700841  
Dept of Navy/ONI Tr No 2198

Problems of Oscillations of a Fluid Subjected to Surface Tension Forces, by M. M. Moiseyev, F. L. Chernous'ko. RUSSIAN, per, Zh Vych Mat i Mat Fiz, Vol V, No 6, 1965, pp 1071-1095.  
\*NASA TT F-10,141

Scientific  
Physics (Contd)

A Device for Compensating the Linear Shift of an Image During Oblique Photography With a Successive-Frame Aerial Camera, by A. I. Sizov. 3 pp. RUSSIAN, Patent No. 165374, 30 Dec 1963, 1 pp. 9700956  
FTD-HT-66-86

Air-Coupled Surface Waves, by O. F. Hastrup, 16 pp. DANISH, rpt, Luftkoblede Overfladebolger, Dec 1961, F.993.01-1, QHA 1461. 9700738  
Dept of Navy/ONI Tr No 2188

Photospectrometric Study of Long Sparks in Air, By Arlette Vassy, Harald Norinder, et al 21 pp. FRENCH, per, J of Arkiv for Fysik, Vol VI, No 42, 1953, pp 437-450. 9700889  
Dept of Navy/ONI Tr No 2184

Magnetoresistance os Single Crystals of Iron in Saturated Fields, Part I. Residual Resistance, by Ch. Bazan. 8 pp. GERMAN, per, Acta Physica Polonica, Vol XXVIII, No 6(12), 1965, pp 777-782.  
Dept of Navy Tr 4771/NRL Tr 1060

Structure of Defects in Alkali Halide Crystals, by Heinz Pick, 83 pp. GERMAN, per, Ergebnisse det Exakten Naturwissenschaften, Vol XXXVIII, 1965, pp 1-83. 9700464-V  
Dept of Navy/ONI Tr No 2189

Stereoscopy in the Service of Isochromatic and Heterochromatic Photometry, by C. Pulfrich. 52 pp. GERMAN, per, Die Naturwissenschaften, Vol X, No 25, 23 Jun 1922, pp 553-564; No 27, 17 July 1922, pp 596-601; No 33, 18 Aug 1922, pp 714-722; No 34, 25 Aug 1922, pp 735-743; No 35, 1 Sept 1922, pp 751-761.  
ACSI I-9857  
ID 2204007866-V

Surface Structures and Crystal Structure Defects in Electron-Microscopic Image Investigated by Means of NaCl Crystals, by H. Bethge, Part I, 30 pp. GERMAN, per, Physica Status Solidi, Vol II, No 1, 1962, pp 3-27.  
Dept of Navy Tr No 4770/NRL Tr No 1059

Scientific  
Physics (Contd)

Surface Structures and Crystal Structure Defects in Electron-Microscopic Image Investigated by Means of NaCl Crystals, by H. Bethge. Part II. 85 pp.  
GERMAN, per, Physica Status Solidi, Vol II, No 7, 1962, pp 775-820.  
Dept of Navy Tr 4738/NRL Tr No 1055

Anisotropic Plastic Deformation, by Th. Lehmann. GERMAN, per, Rheologica Acta, Vol 3, No 4, 1964, pp 281-285.  
AEC ORNL-tr-1278  
EDC 7/20/66

Skyshine Measurements and Their Comparison with Estimates from Diffusion Theory, by G. Bathow and U. Clausen, et al,  
GERMAN, bk, Skyshine-Messungen und ihr Vergleich mit Abschätzungen aus der Diffusionstheorie, Desy-66/3.  
\*AEC-ORNL-Tr-1249  
EDC 7/21/66

Intense Emission of Secondary Electrons by Incompact Layers of BaF<sub>2</sub>, by Hellmut Seiler, Manfred Stark, 14 pp.  
GERMAN, per, Zeit Angew Phys, Vol XIX, No 2, 1965, pp 90-93. 9233098  
AEC SLAC-TR-40

A Microwave Method for Detection of Intense Shock Waves in Nonconducting Solids, by H. D. Vom Stein, B. Koch,  
GERMAN, per, Zeit fur Naturforschung, Vol XXa No 1, 1965, pp 157-159.  
\*Dept of Navy/NRL

Natural Width of Pressure Broadening of Spectrum Lines, by R. Minkowski.  
GERMAN, per, Zeit. Fur Physik, Vol 36, 1926, pp 839-858.  
\*AEC ORNL-tr-1277  
EDC 7/20-66

Comment on the Multiple Emission of Secondary Electrons, by R. Kollath, K. H. Simon.  
GERMAN, per, Z fur Physik, Vol CLXXIX, 1964, pp 274, 275.  
AEC-ORNL-tr-1266

Investigations on the Multiple Emission of Secondary Electrons, by Peter Haussler.  
GERMAN, per, Z fur Physik, Vol CLXXIX, 1964, pp 276-284.  
AEC-ORNL-tr-1267

Scientific  
Physics (Contd)

A Gamma Quantum Spectrometer for Measurements in the Atmosphere, by K. Kohn.  
GERMAN, per, Z fur Phys, Vol CXCI, No 3, 1966, pp 443-458.  
\*AEC

Experimental Studies of Steam-Water Separator for Boiling Water Reactors,  
JAPANESE, rpt, Ishikawajima-Harima Eng. Rev. (Tokyo), Jan 1965, pp 11-19. 9233257  
AEC NSJ-tr-62

Variation with Temperature of the Infra-Red Spectrum of Polyvinyl Chloride. Part II. Behaviour in the Region of the Glass Transition Temperature, by Koji Fukawa.  
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 66, No 11, 1963, pp 1605-1609.  
NLL Ref: 5207B 1965 (1127)

Application of Physics in Production, 7 pp.  
RUMANIAN, per, Stiinta si Tehnica, Vol 17, No 3, Mar 1966, pp. 3-5, 12.  
JPRS 36029

Glass Microelectrodes with Metal Conductors for Extracellular Recording of Potentials, by L. V. Reshod'ko and O. P. Vetrov, 6 pp.  
UKRAINIAN, per, Fiziologichnyy zhurnal, Vol XII, No 2, Mar-Apr 1966, pp. 272-274.  
JPRS 36165

Optical Properties of Mercury Sulfide, by B. F. Bilen'kiy, M. V. Pashkovskiy.  
UKRAINIAN, per, Ukrains'kii Fizichnii Zhurnal, Vol VIII, No 8, 1963, pp 913-915.  
Dept of Navy Tr 4742/APL/JHU TG 230-T463

Scientific  
Miscellaneous

Problems of Morphological Analysis in  
Machine Translation From the Georgian Language  
by L. Tamarashvili.

RUSSIAN, per, Trudy Instituta Elektroniki  
Avtomatiki i Telemekhaniki AN GSSSR,  
Vol IV, 1963, pp 11-20.  
\*FED RT-66-446

Fourth All-Union Scientific and Technical  
Conference on Quality Control and Non-  
Destructive Testing, by B. S. Fayerman, 5 pp.  
RUSSIAN, per, Zavodskaya Laboratoriya, No 1,  
Jan 1966, pp. 126-128.  
JPRS 36183

Candidates for Academicians and Corresponding  
Members of the Bulgarian Academy of Sciences,  
5 pp.  
BULGARIAN, np, Otechestven front, 15 May 1966,  
pp. 3, 4.  
JPRS 36196

Documentation and Scientific Information.  
Problems and Trends, by Maria Dembowska.  
POLISH, rpt, Dokumentacja i Informacja Naukowa  
-- Zarys Problematyki i Kierunki Rozwoju,  
Warsaw, 1965, 146 pp.  
CFSTI TI-67-56000  
(Special Project)

INFORMATION RECEIVED DURING JULY

ON COVER-TO-COVER TRANSLATIONS

Doklady Akademii Nauk SSSR, Biological Section,  
Vol CLXIII, No 1-6, Jul-Aug 1965.  
CB

Doklady Akademii Nauk SSSR, Earth Science Section,  
Vol CLXV, No 1-6, Nov/Dec 1965.  
Am Geol Inst  
Vol CLXV, No 1-6, June 1966

Doklady Akademii Nauk SSSR, Phys Section,  
Vol CLXV, No 4-6, December 1965.  
Am Inst Phys  
Vol X, No 12, June 1966

Doklady Akademii Nauk SSSR, Physics Section,  
Vol CLXVI, No 1-3, Jan 1966.  
Am Inst Phys  
Vol XI, No 1, July 1966

Elektrosvyaz, Vol XX, No 1, 1966.  
IEEE

Fizika Tverdogo Tela, Vol VIII, No 1, 1966.  
Am Inst Phys  
Vol VIII, No 1, July 1966

Genetika, No 4, 1966.  
JPRS 36631

Geodeziya i Kartografiya, No 4, 1965.  
Am Geophysical Union

Gigiyena Truda i Professional'nyye Zabolevaniya,  
Vol X, No 4, 1966.  
JPRS 36341

Izvestiya Akademii Nauk SSSR, Atmosfera i Okeano-  
licheskii, Vol I, No 12, 1965.  
Am Geophys Union

Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya,  
No 12, 1965,  
Am Geophysical Union

Klinicheskaya Meditsina, Vol XLIV, No 2, 1966.  
JPRS 36283

Klinicheskaya Meditsina, Vol XLIV, No 3, 1966.  
JPRS 36288

Klinicheskaya Meditsina, Vol XLIV, No 4, 1966.  
JPRS 36301

Meditsinskaya Promyshlennost SSSR, Vol XX,  
No 4, 1966.  
JPRS 36332

Radiotekhnika, Vol XXI, No 1, 1966.  
IEEE

Radiotekhnika i Elektronika, No 12, 1965.  
IEEE

Referativnyi Zhurnal Mekhanika, No 2, 1966.  
Ministry of Aviation

Referativnyi Zhurnal Mekhanika, No 1, 1966.  
Ministry of Aviation

Sovetskoye Zdravookhraneniye, Vol XXV, No 3, 1966.  
JPRS 36276

Sovetskoye Zdravookhraneniye, Vol XXV, No 4,  
1966.  
JPRS 36290

Steklo i Keramika, Vol XXII, No 7-8, 1965.  
CB

Vestnik Akademii Nauk SSSR, Vol XXXVI, No 2, 1966.  
JPRS 36291

Vestnik Akademii Meditsinskikh Nauk SSSR, No 6,  
1966.  
\*JPRS/1885

Vestnik Meditsinskikh Nauk SSSR, Vol XXI, No 4,  
1966.  
JPRS 36357

Vestnik Protivovozdushnoy, No 5, 1966.  
\*ACSI J-0347  
ID 2204037766

Zhurnal Analiticheskoi Khimii, Vol XX, No 9,  
1965.  
CB

Zhurnal Eksperimental'noi i Teoreticheskoi  
Fiziki, Vol XLIX, No 5, Nov 1965.  
Am Inst Phys  
Vol XXII, No 5, 1966

Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy  
Fiziki, No 3, 1963.  
FTD-MT-64-85

Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoi  
Fiziki, No 1, Jan/Feb 1965.  
Paraday Press

Zhurnal Tekhnicheskoi Fiziki, Vol XXXVI, No 1,  
1966.  
Am Inst Phys  
Vol XXXVI, No 1, July 1966

DOKLADY AKADEMII  
NAUK SSSR

EDITORIAL BOARD

L. A. Artalevich /  
A. N. Frankin  
B. A. Kazanski  
A. N. Kolmogorov  
(Assistant Editor)  
D. S. Korshinski  
S. A. Lebedev  
A. I. Oparin  
(Editor-in-Chief)  
A. V. Peve  
L. I. Sedov  
N. M. Strakhov  
S. A. Vekshinski  
A. L. Yanshin

DOKLADY  
BIOLOGICAL  
SCIENCES

PROCEEDINGS of the  
ACADEMY OF SCIENCES  
of the USSR

A translation of DOKLADY AKADEMII NAUK SSSR

© 1966 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING  
CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Volume 163, Numbers 1-6

July-August, 1965

CONTENTS

	PAGE	RUSS. ISSUE	RUSS. PAGE
CYTOLOGY			
The Mitotic Cycle in a UV-Irradiated Cell Culture—V. V. Tenskikh . . . . .	427	1	217
An Electron-Microscopic Analysis of the Neurosecretory Elements of the Neuro-Intermediate Lobe of the Hypophysis in the Black Sea Skate—A. L. Polenov and M. A. Belen'kil . . . . .	431	3	731
The Inhibiting Action of D, L-Hexafluorvaline on the Growth of HeLa Cells —G. A. Galegov and M. S. Benyumovich . . . . .	435	6	1484
ECOLOGY			
The Effect of Different Degrees of Salinity on the Survival of Black Sea Oyster Larvae ( <i>Ostrea taurica</i> Kryn.) —A. I. Ivanov . . . . .	438	5	1256
EMBRYOLOGY			
Timing of Morphological and Functional Maturation of Digestive Organs in Embryogenesis of Land Turtles (Testudinidae)—I. N. Zusman . . . . .	441	1	266
Study of the Limiting Factors of Glycolysis in the Embryo of Teleost Fishes —Yu. G. Yurovitskil and L. S. Mil'man . . . . .	445	3	781
Injurious Effect of Aminopterin at Different Stages in the Embryonic Development of Rats—V. S. Baranov . . . . .	448	4	1036
Importance of Wolffian Ducts in the Formation of Mullerian Ducts in Amphibians—D. A. Potemkina . . . . .	451	4	1032
Effect of 2,4-Diamino-5-chlorophenyl-6-ethylpyrimidine on the Embryonic Development of Rats—A. P. Dyban, I. M. Akimova, and V. A. Svetlova . . . . .	455	6	1514
EVOLUTIONARY MORPHOLOGY			
The Role of Hearing in Species Divergence and the Evolution of Birds—V. D. Il'ichev . .	459	2	326
GENETICS			
Mutations in Wheat Caused by Chemical Mutagens—N. N. Zos, S. I. Makarova, P. V. Kolotankov, T. V. Sal'nikova, N. N. Koshanova, and N. V. Grigorova . . .	462	1	224

Annual Subscription: \$75

Single Issue: \$15

Single Article: \$10

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, A Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

# CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
<b>Variability and Heredity of the Content and Quality of Gluten in Grain in Intraspecific Hybridization of <i>Triticum aestivum</i> L.</b>			
-O. I. Maistrenko and A. V. Troshina .....	465	1	227
<b>Antitumoral Properties of Strong Chemical Mutagens (Derivatives of Nitrosourea)</b>			
-N. M. Emanuel', E. M. Vermei', I. A. Rapoport, S. A. Kruglyak, L. M. Dronova, and L. A. Ostrovskaya .....	469	2	483
<b>Effect of Mechanical Breaks of the Pericarp on the Germination of Triploid Corn Seeds</b> -B. F. Yudin .....	472	5	1253
<b>Cross Transformation of Mutant T4 Phages</b> -I. Rubinkas and S. I. Alkhanyan .....	474	6	1487
<b>HISTOLOGY</b>			
<b>Activity of Lipolytic Enzymes in the Adipose Tissue During Obesity of Various Origins</b> -F. L. Leites and M. I. Bronshtein .....	477	1	221
<b>Antitoxic Properties of Leucocytes</b> -V. E. Pigarevskii and G. I. Il'in .....	480	3	734
<b>HYDROBIOLOGY</b>			
<b>The Production of Melosira in Lake Baikal</b> -K. K. Votintsev and G. I. Popovskaya .....	483	6	1491
<b>MICROBIOLOGY</b>			
<b>Accumulation of Natural Radioactive Elements by Azotobacter and by Algal and Protozoal Cells</b> -N. A. Krasil'nikov and A. A. Drobkov .....	487	2	486
<b>Effect of Proteinases of Mold Fungi on the Blood Thrombi</b> -A. A. Imshenetskii, S. Z. Brotskaya, and V. V. Korshunov .....	490	3	737
<b>Inhibition of the Growth of Certain Microorganisms by Threonine</b>			
-Yu. N. Karasevich, L. P. Volkova, and S. A. Butenko .....	494	5	1259
<b>Fungicidal Properties of the Components of Technical Hexachlorocyclohexane</b>			
-N. N. Selochnik .....	498	5	1262
<b>Mathematical Simulation of the Growth of Microorganisms in Continuous Cultivation</b> -N. V. Stepanova, Yu. M. Romanovskii, and N. D. Ierusalimskii ...	500	5	1266
<b>PARASITOLOGY</b>			
<b>The Later Stages of Spermatogenesis in the Tapeworm <i>Taeniarhynchus saginatus</i> (GOEZE, 1782)</b> -L. F. Pashchenko .....	504	1	269
<b>PHYSIOLOGY</b>			
<b>Mechanism of the Vagus Nerve Effect on Ventricular Extrasystoles</b>			
-E. B. Babekii and L. S. Ul'yaninskii .....	507	1	254
<b>Some Physical Properties of the Structure of Solitary Mechanoreceptors (Pacinian Corpuscles)</b> -A. S. Mirkis .....	511	1	258
<b>A Further Study of the Mechanism of Histoinnate Shock</b> -A. S. Shevelev .....	514	1	262
<b>Functional Characteristics of the Small Arteries of the Cerebral Cortex</b>			
-G. I. Mchedlishvili and D. G. Baradmidze .....	518	2	529
<b>Penetration of Bromine into Tissues After Disturbance of Their Innervation</b>			
-Yu. A. Petrovich .....	521	2	521
<b>Neurodynamic Peculiarities of Zones of the Cerebral Cortex in Man</b> -S. D. Amron ...	525	3	777
<b>Dependence of the General and Tissue Respiration of <i>Nereis diversicolor</i> (O. F. Müller) on the Body Size</b> -M. N. Vilenkina .....	529	4	1019
<b>Investigation of Certain Aspects of Protein Metabolism of the Intact and Denervated Eye Using Glycine-C<sup>14</sup></b> -Yu. A. Petrovich .....	532	4	1021
<b>Influence of the Pituitary-Adrenal System on the Permeability of the Tissue-Blood Barrier</b> -L. G. Polyanskaya .....	536	4	1025

(Continued)

Available From Consultants Bureau

## CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
Effect of Graded Physical Exertion, Abolishing Mental Fatigue, on the Evoked Potentials of the Child's Brain—G. N. Speranskii and Yu. M. Prutsevich . . . . .	539	4	1028
Suprasegmental Inhibition of the Internuncial Neurons of the Spinal Cord in Cats with Local Tetanus—Yu. S. Sverdlov and V. I. Alekseeva . . . . .	543	5	1289
Relationship Between the Electrical Activity of the Two Cerebral Hemispheres and Its Connection With the State of the Higher Nervous Activity in Children —G. N. Speranskii and Yu. M. Prutsevich . . . . .	547	5	1293
<b>ZOOLOGY</b>			
Oligomerization of Homologous Elements in Siphonophoran Colonies as one of the Characteristics of Colonial Integration Among Siphonanthae—S. D. Stepan'yants . . . . .	551	2	319
The Processes of Conjugation in <i>Paramecium putrinum</i> Clap. et Lachm. V. and Regression to Amphimixis in Mixotype B.—A. V. Yankovskii . . . . .	555	2	523

The Russian press dates (podpisano k pechat!) of the first and last issues covered in this issue of the translation were, respectively, 6/18/1965 and 8/18/1965. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals, starting reasonably soon after this date and ending shortly after the later date.

Available From Consultants Bureau

# DOKLADY of the ACADEMY of SCIENCES of the U.S.S.R. (DOKLADY AKADEMII NAUK SSSR) EARTH SCIENCE SECTIONS

Vol. 165, Nos. 1-6

(Russian original dated November-December 1965)

June 1966

## CONTENTS

	Page
GEOPHYSICS	
THE KAMEN'-ON-OB' EARTHQUAKE OF FEBRUARY 15, 1965, by N. D. Zhalkovskiy, G. M. Tsibul'chik and N. V. Shebalin . . . . .	1
MEASUREMENT OF THE CONCENTRATION OF CLOUD CONDENSATION NUCLEI, by A. G. Laktionov . . . . .	3
GENESIS OF VOLCANIC TREMORS AND THE LONG-RANGE FORECASTING OF ERUPTIONS, by G. S. Shteynberg . . . . .	6
GEOLOGY	
DIFFERENTIATION OF THE TERTIARY PLUTONIC AND VOLCANIC ROCKS OF CENTRAL KAMCHATKA INTO ASSOCIATIONS, by O. N. Volynets, A. V. Koloskov, G. B. Flerov, D. I. Frikh-Khar and N. L. Shilin . . . . .	9
MIDDLE PALEOZOIC INTRUSIONS OF THE ALAY RANGE (SOUTHERN TIEN SHAN), by R. D. Gavrilin and I. Z. Filippovich . . . . .	13
RECENT CRUSTAL MOVEMENTS IN MACEDONIA, by D. A. Liliyenberg . . . . .	15
GEOSYNCLINAL ALKALIC BASALTS OF THE NORTHWESTERN PART OF THE PACIFIC OCEAN BELT, by V. K. Rothman and B. A. Markovskiy . . . . .	19
LOWER RИPIEAN PHOSPHORITE IN THE MOUNTAINS AROUND SOUTHERN SIBERIA, by I. S. Borovskaya and N. S. Zaytsev . . . . .	22
COMPOSITION OF BEACH DEPOSITS OF THE CRIMEAN PENINSULA, by O. S. Bratus' . . . . .	25
NEW FACTS ABOUT THE CANYON IN MAYKOP SEDIMENTS NORTH OF STAVROPOL', by V. S. Kosarev, L. A. Kozyar and Z. M. Ipatova . . . . .	28
INTRAMINERALIZATION STOPING DURING THE HYDROTHERMAL FORMATION OF ROCK CRYSTAL, by G. B. Mitich . . . . .	31
A UNIQUE SEQUENCE OF TRIASSIC ROCKS IN THE EXTRA DEEP ARALSOR HOLE (CASPIAN DEPRESSION), by M. I. Bogacheva, Yu. M. Vasil'yev, B. K. Proshlyakov, M. M. Charygin and A. G. Shleyfer . . . . .	33
INTERSTAGE PHASES OF FOLDING, BREAKS AND UNCONFORMITIES OF THE ALPINE ERA OF DEFORMATION IN KOLKHIDYA DEPRESSION, by Ye. K. Vakhaniya . . . . .	36
A FIND OF CYTHERISSA LAGUSTRIS (G. O. Sars) OSTRACODS IN THE OCHER SUITE OF THE TUNKA BASIN (BAIKAL REGION), by M. N. Gramm . . . . .	38
SIVASH AND KARKINITSKIY APATIAN-ALBIAN TROUGHS AT THE SOUTHERN EDGE OF THE RUSSIAN PLATFORM, by Yu. G. Yermakov . . . . .	41
EFFECT OF INTRUSIVE SHEETS ON THE CONFIGURATION OF FOLDS, by N. V. Mel'nikov . . . . .	43
TYPES OF JOINTING AND THEIR INFLUENCE ON THE RESERVOIR PROPERTIES OF SEDI- MENTARY ROCKS COVERING THE WEST SIBERIAN BLOCK, by K. I. Mikulenko and G. B. Ostroy . . . . .	46

(Continued)

Available From American Geological Institute  
Vol CLXV, No 1-6, June 1966

**DOKLADY AKADEMII NAUK SSSR, EARTH SCIENCE SECTION**  
**Vol. CLXV, No 1-6, Nov/Dec 1965**

	Page
AREAL DISTRIBUTION OF COAL SEAM THICKNESSES IN THE DONBAS, by M. I. Rutenberg . . . . .	48
STRATIGRAPHY OF THE KOLA KARELIDES, by A. K. Simon . . . . .	51
TECTONIC-VOLCANIC DEPRESSIONS IN THE NORTH DEVONIAN MARGINAL VOLCANIC BELT OF CENTRAL KAZAKHISTAN, by T. O. Fedorov . . . . .	54
AGE OF THE TIKSI SUITE AND ITS COUNTERPARTS ALONG THE LOWER REACHES OF THE LENA, by O. I. Bogush and O. V. Yuferev . . . . .	57
MORE FACTS ABOUT DEVONIAN EXTRUSIVE ACTIVITY ON THE EASTERN FLANK OF VORONEZH MASSIF, by P. A. Karpov and N. A. Chugunov . . . . .	59
THE ZONING OF KIMMERIDGIAN SEDIMENTS OF THE WEST SIBERIAN PLAIN, by I. G. Kilomova and T. F. Zaytseva . . . . .	62
CORRELATION OF LOWER TRIASSIC SEDIMENTS OF THE NORTHERN USSR USING BIVALVE MYELOPODS, by V. A. Molin . . . . .	65
REEFS OF MOSCOVIAN AGE IN THE URALS, by A. A. Sultanayev . . . . .	67
NEW ULTRABASITE BELTS IN SOUTHERN MONGOLIA, by R. A. Khasin and A. A. Khrapov . . . . .	70
PRE-ASSELIAN EROSION IN THE NORTHERN URALS, by V. A. Chernmykh and N. N. Kuz'kova . . . . .	73
MORE FACTS ABOUT THE SUBSURFACE STRUCTURE OF THE ARARAT BASIN, ARMENIAN SSR, by M. S. Burshtar and A. A. Tolmachevskiy . . . . .	76
RELATION BETWEEN AURIFEROUS QUARTZ VEINS AND GOLD-SULFIDE HOST-ROCK MINERALIZATION IN PRECAMBRIAN GOLD ORE DEPOSITS (LENA GOLD FIELD), by V. A. Buryak . . . . .	79
IDENTIFICATION OF SEDIMENTS OF THE KRAMATORSK SUITE AND THE STRATIG- RAPHY OF POTASSIUM-BEARING HORIZONS IN THE NORTHWESTERN DNEPER- DONETS BASIN, by S. M. Korenevskiy and K. S. Supronyuk . . . . .	81
ROCK SAMPLES FROM THE UPPER MANTLE OF THE INDIAN OCEAN RIFT ZONE, by G. B. Udintsev and V. I. Chernysheva . . . . .	85
POSSIBLE REEF ORIGIN OF DOLOMITES OF THE LESSER KARA-TAU PHOSPHORITE FORMATION, by N. G. Brodskaya and V. N. Kholodov . . . . .	88
FIRST FIND OF AN OLIGOCENE SPECIES OF NUMMULITES INTERMEDIUS D'ARCHIAC ON THE SOUTHERN SIDE OF THE UKRAINIAN CARPATHIANS, by B. T. Golev and Ya. V. Sovchik . . . . .	91
CORRELATION OF UPPER PRECAMBRIAN SECTIONS OF THE RUSSIAN PLATFORM AND URALS, by A. A. Klevtsova . . . . .	93
COMPOSITION OF LEAD-ZINC DEPOSITS OF NORTHERN OSETIA AS A FUNCTION OF DEPTH OF FORMATION, by M. M. Konstantinov . . . . .	96
BASEMENT RELIEF OF THE SIBERIAN PLATFORM, by L. Ya. Provodnikov . . . . .	99
APPLICABILITY OF FORMAL SPECIES OF COLUMNAR STROMATOLITHS TO THE INTER- REGIONAL CORRELATION OF RIPIEAN SEDIMENTS, by M. A. Segikhov and V. A. Komar . . . . .	102
DEEP FAULTS OF THE SOUTHWEST MARITIME REGION, by V. O. Solov'yev . . . . .	106
MORE FACTS ABOUT THE LOWER QUATERNARY OF THE WESTERN MARGIN OF THE YANA-INDIGIRKA PLAIN, by I. Ya. Timashev . . . . .	109

**HYDROGEOLOGY**

AZONAL SUBSURFACE WATERS IN JURASSIC SEDIMENTS OF SOUTH MANGYSHLAK, by V. N. Kortaenshteyn . . . . .	112
---	-----

**MINERALOGY**

A NEW ANDALUSITE OCCURRENCE IN THE UKRAINIAN CRYSTALLINE SHIELD, by V. V. Bayrakov and A. A. Bochkov . . . . .	115
SYNTHETIC GILLESPIE $BaFeSi_4O_{10}$ , by L. A. Belitskiy and N. Ya. Bondareva . . . . .	118
DIOCTAHEDRAL IM AI MICA FROM THE LEVO-INGODA TIN-TUNGSTEN DEPOSIT, TRANSBAIKAL, by B. B. Zvyagin, Ye. I. Dolomanova, S. V. Soboleva and V. A. Moleva . . . . .	121
RELATION OF GROWTH CONDITIONS AND SUBSEQUENT HISTORY OF QUARTZ FROM DIFFERENT PEGMATITE ZONES TO SPECIFIC THERMOFLUORESCENCE, by I. T. Bakumenko and V. S. Lysakov . . . . .	124
PHOTOLUMINESCENCE OF SPHALERITE FROM URAL PYRITE DEPOSITS, by P. Ya. Yarosh and Yu. F. Yurin . . . . .	127
PRESSURE AND TEMPERATURE CHANGES DURING THE FORMATION OF FLUORITE- BEARING PEGMATITE, by L. Sh. Bazarov . . . . .	127
ZONAL IRIDESCENCE OF CORUNDUM, by V. I. Goroshnikov . . . . .	131
THE USE OF LANTHANIDE ABSORPTION IN THE VISIBLE REGION OF THE SPECTRUM IN RARE-EARTH MINERAL STUDIES, by O. B. Dudkin . . . . .	133
IRON-RICH PUMPELLYTE FROM THE NORIL'SK DISTRICT AND A NEW DIAGRAM FOR PUMPELLYTES, by V. V. Zolotukhin, Yu. R. Vasil'yev and N. I. Zyuzia . . . . .	136
THE STRUCTURE OF CRIMEAN ALUSHTITE, by Yu. M. Korolev . . . . .	140

(Continued)

Available From American Geological Institute  
Vol. CLXV, No 1-6, June 1966

**DOKLADY AKADEMII NAUK SSSR, EARTH SCIENCE SECTION**  
**Vol CLIV, No 1-6, Nov/Dec 1965**

	Page
OWYIHEITE FROM THE DARASUN ORE FIELD (EASTERN TRANSBAIKAL), by O. L. Sveshnikova and A. I. Rakcheyev .....	144
<b>PETROGRAPHY</b>	
TRACE ELEMENTS IN ORES OF A CASSITERITE-QUARTZ DEPOSIT IN THE NORTH- EASTERN USSR, by A. V. Zil'bermintz .....	147
COMPARISON OF THE FACTORS AFFECTING THE CRYSTALLIZATION OF EXTRUSIVE AND INTRUSIVE TRAPS, by A. A. Kuznetsov .....	150
THERMAL CONDUCTIVITY OF GRANITE AT HIGH TEMPERATURES, by U. I. Moiseyenko, Z. A. Solov'yeva and V. A. Kutolin .....	153
A NEW DIAGRAM FOR A TWO-FELDSPAR GEOLOGIC THERMOMETER BASED ON THE THERMODYNAMIC PROCESSING OF EXPERIMENTAL DATA, by I. D. Ryabchikov .....	154
AGE OF GRANTOIDS OF THE TOPAR COMPLEX IN THE NORTHERN DZUNGARIA- BALKHASH GEOSYNCLINE, by R. N. Sobolev, I. L. Dorokhov and Yu. A. Borshchevskiy ..	157
OXIDE-TYPE SUPERGENE NICKEL MINERALIZATION, by I. I. Edel'shteyn .....	159
FRESH INDICATIONS OF THE PRIMARILY SEDIMENTARY ORIGIN OF CARBONATITE OF THE GULA INTRUSION, by N. Z. Yevzikova and L. N. Il'chenko .....	161
JOINT DISTRIBUTION PATTERNS OF CONCENTRATIONS OF PETROGENETIC ELEMENTS IN ROCKS OF THE ANDESITE-DACITE ASSOCIATION (NORTH SAYAN TECTONIC ZONE), by V. B. Kryukov .....	165
<b>LITHOLOGY</b>	
MIXED-LAYER MONTMORILLONITE-HYDROMICA FORMATION IN THE LOWER Creta- ceous of the CASPIAN KUBA OIL AND GAS FIELD OF THE AZERBAIDZHIAN SSR, by G. I. Teodorovich, D. D. Kotelnikov and A. A. Mamedov .....	168
<b>GEOCHEMISTRY</b>	
RADIOACTIVITY OF SANDS IN CENTRAL ASIA, by L. I. Boltneva, L. I. Buyanova, A. V. Dmitriyev, V. A. Ionov, R. M. Kogan and I. M. Nazarov .....	172
ISOTOPIC COMPOSITION OF URANIUM IN WATERS AND SEDIMENTS OF THE BLACK SEA AND THE SEA OF AZOV, by D. S. Nikolayev, K. F. Lazarev, O. P. Korn, M. I. Yakunin, V. M. Drozhzhin and A. G. Samartseva .....	175
RELATIONSHIP BETWEEN IONIZATION POTENTIALS OF ELEMENTS AND THE CONCEN- TRATION NECESSARY FOR THE FORMATION OF THEIR OWN MINERALS, by N. A. Solodov .....	177
RUBIDIUM IN SUBSURFACE AND SURFACE WATERS OF THE CASPIAN DEPRESSION, by M. S. Galitsyn and L. V. Slavyanova .....	180
FORMS OF OCCURRENCE OF BORON IN ROCKS, by Yu. I. Goncharov and A. Ye. Vasil'evskaya ..	183
COMPOSITION OF NATURAL GAS IN THE LOWER CRETACEOUS OF THE NORTHERN CAUCASUS AS RELATED TO GRADE OF METAMORPHISM OF STRATAL WATER, by V. I. Yermakov .....	185
VARIATION IN THE COMPOSITION OF GASES IN GAS POOLS, by V. P. Nikonov .....	189
NATURAL GASES OF ORE DEPOSITS, by A. I. Kravtsov and A. I. Fridman .....	192
EXPERIMENTAL STUDY OF THE FORMATION OF IRON SULFIDES FROM SOLUTION, by D. F. Korolev and S. V. Kozerenko .....	194
OLD ATMOSPHERIC ARGON IN SEDIMENTARY ROCK MINERALS, by V. V. Cherdyn'tsev and Ye. M. Kolesnikov .....	196
<b>PALEONTOLOGY</b>	
LIKHVIN INTERGLACIAL FLORA NEAR MOSCOW, by V. N. Sukachev and V. T. Sokolovskaya ..	200
INDEX FOR 1965 .....	203

Available From American Geological Institute  
 Vol CLIV, No 1-6, June 1966

# Soviet Physics DOKLADY

A Translation of the "Physics Sections" of the Proceedings of the  
Academy of Sciences of the USSR

(Russian Original Vol. 165, Nos. 4-6, December, 1965)

Vol. 10, No. 12, pp. 1125-1274

June, 1966

## CONTENTS

	(E)	RUSS. PAGE	RUSS. ISSUE	RUSS. PAGE
<b>CRYSTALLOGRAPHY</b>				
Frequencies of Occurrence of Right- and Left-Handed Crystals. <u>É. D. Rogacheva</u> .....	(E)	1125	6	1298
<b>CYBERNETICS AND CONTROL THEORY</b>				
Analytical Conditions for a Real Function to be Positive. <u>M. V. Meerov</u> ....	(T)	1128	4	780
<b>FLUID MECHANICS</b>				
The Calculation of One-Dimensional Flow for Cylindrical and Plane Explosions in a Perfectly Conducting Gas with the Back Pressure and Magnetic Field Taken Into Account. <u>B. P. Korobeinikov</u> .....	(T)	1131	5	1019
Motion of a Three-Dimensional Diffusing Vortex Tube in an Incompressible Viscous Fluid. <u>V. É. Vaskin</u> .....	(T)	1135	6	1261
<b>MATHEMATICAL PHYSICS</b>				
Evolution Graphs and Their Application to Investigation and Solution of Systems of Linear Equations. <u>P. E. Krasnushkin</u> .....	(T)	1138	6	1265
<b>MECHANICS</b>				
Periodic Regimes for Some Distributed Systems. <u>N. N. Kochina</u> .....	(T)	1142	5	1015
<b>PHYSICS</b>				
Quantum Depolarization of Electrons in a Magnetic Field. <u>V. N. Baier</u> and <u>Yu. F. Orlov</u> .....	(T)	1145	4	783
Stimulated Currents and Electroluminescence in Sublimed Zinc Sulfide Films at 77°K. <u>A. G. Gol'dman</u> , <u>G. A. Zholkevich</u> , and <u>N. P. Lazar'</u> .....	(E)	1148	4	786
Kirchhoff's Law in Gamma Spectroscopy. <u>Yu. T. Mazurenko</u> .....	(T)	1151	4	790
On the Possibility of Producing Unexcited Compound Nuclei of the Heavy Transuranic Elements. <u>Ya. Maly</u> .....	(T)	1153	4	792
High-Frequency Drift Instability in Plasma. <u>A. B. Mikhailovskii</u> and <u>É. A. Pashitskii</u> .....	(T)	1157	4	796
Theory of the SU <sub>2</sub> Symmetry of Elementary Particles. <u>Yu. V. Novosheilov</u> and <u>I. A. Terent'ev</u> .....	(T)	1160	4	800
Shapes of Exciton Absorption Lines of Cuprous Oxide Crystals. <u>V. V. Sobolev</u> .....	(E)	1162	4	803
Ultrarelativistic Dispersal of a Gas in a Gravitational Field. <u>K. P. Stanyukovich</u> and <u>V. Ts. Gurovich</u> .....	(T)	1165	4	806
Concerning the Effect of Change of Structure of the Nucleus on the Probability of $\beta$ Decay. <u>É. É. Berlovich</u> and <u>Yu. N. Novikov</u> .....	(T)	1168	5	1026

(Continued)

Copyright © 1966 by the American Institute of Physics, Incorporated

Available From The American Institute of Physics  
Vol X, No 12, June 1966

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
An Equation for Buildup of Radiation-Induced Electron Centers in Alkali-Halide Crystals. D. I. Vaisburd and I. Ya. Melik-Gaikazyan..	(T) 1171	5	1029
Relation of Radiationless Deactivation Probability to Spectral Characteristics for Complex Organic Compounds. E. N. Viktorova and V. V. Zelinskii .....	(E) 1174	5	1033
Alteration of the Long-Range Structure of Sodium Silicate Glass on Heating. D. A. Goganov and E. A. Porai-Koshits .....	(E) 1177	5	1037
Magnetic Moment of an Atom in a Ferromagnet and the Field at the Nucleus. F. M. Gal'perin .....	(E) 1180	5	1041
Effects of Loss of Ions from a Discharge on the State of Ionization of Trace Components. N. M. Gegechkori .....	(T) 1184	5	1045
Determination of Rate Constants for Energy Transfer in Chelate Complexes of Rare-Earth Ions. V. L. Ermolaev, V. G. Alekshin, and E. A. Saenko..	(E) 1186	5	1048
"Free" and "Bound" Charge Approximations for a System of Charged Particles. Self-Consistent Equations for the Second Distribution Functions. Yu. L. Klimontovich .....	(T) 1189	5	1052
CaF <sub>2</sub> :Dy <sup>3+</sup> Laser Operating in a Repetitive Giant-Pulse Mode with Continuous Pumping. V. K. Konyukhov, V. V. Kostin, L. A. Kulevskii, T. M. Murina, and A. M. Prokhorov .....	(E) 1192	5	1056
On Mechanisms of Superconductivity. V. Z. Kresin .....	(T) 1194	5	1059
Low-Temperature Spectral Distribution of the Intrinsic Photoeffect in Cadmium Sulfide and Cadmium Selenide. V. V. Sobolev .....	(T/E) 1196	5	1062
The Stability of Rarefied Plasma in Short Traps. V. V. Arsenin .....	(T) 1199	6	1269
Repulsive Interaction Potentials Between Noble Gas Atoms. A. B. Kamnev and V. B. Leonas .....	(T/E) 1202	6	1273
On Maximum Critical Magnetic Fields in Superconducting Metals. B. G. Lazarev, E. E. Semenenko, A. I. Sudovtsov, and V. M. Kuz'menko.	(E) 1204	6	1275
Use of Radioactive Sources of Characteristic Radiation in X-Ray Structural Analysis. S. I. Lobov and V. A. Tsukerman .....	(E) 1207	6	1278
The Zeeman Effect in Gaseous Lasers. N. N. Rosanov and A. V. Tulub .....	(T/E) 1209	6	1280
Some Problems of the Theory of Ordering in Crystals. A. G. Khachatryan.	(T) 1212	6	1284
TECHNICAL PHYSICS			
On the Effect of Deviation from Stoichiometry in the Semiconductor In <sub>2</sub> Te <sub>3</sub> . L. S. Palatnik, L. V. Atroshchenko, L. P. Gal'chinskii, and V. M. Koshkin .....	(E/T) 1215	4	809
The Mechanism of Cavitation Erosion of Cement- and Polymer-Based Concretes. K. K. Shal'nev, N. P. Rosanov, P. A. Pehenitsyn, Yu. P. Inozemtsev, and V. I. Sakharov .....	(E) 1219	4	813
The Influence of Neutron Irradiation on the Recrystallization of Uranium. V. D. Dmitriev, Sh. Sh. Ibragimov, and S. G. Nikol'shin .....	(E) 1223	5	1065
Measurements of Longitudinal Elastic Wave Velocities in Rock Specimens at Pressures up to 40,000 kg/cm <sup>2</sup> . M. P. Volarovich and A. I. Levykin	(E) 1227	6	1287
THEORY OF ELASTICITY			
The Elastic Equilibrium of an Isotropic Plane Supported at a Doubly Periodic Set of Points, Under the Action of an Arbitrary Doubly Periodic Transverse Load. S. I. Grigolyuk and L. A. Fil'chinskii .....	(T) 1230	8	1023
INDEXES TO VOLUME 10, 1965			
Author Index .....	1235		
Subject Index .....	1259		

Available From The American Institute of Physics  
Vol I, No 12, June 1966

# Soviet Physics DOKLADY

A Translation of the "Physics Sections" of the Proceedings of the  
Academy of Sciences of the USSR

(Russian Original Vol. 166, Nos. 1-3, January, 1966)

Vol. 11, No. 1, pp. 1-96

July, 1966

## CONTENTS

		PAGE	RUSS. ISSUE	RUSS. PAGE
<b>ASTRONOMY</b>				
The Generation of Continuous Emission in Cold Stars. <u>G. A. Gurzadyan</u> . . .	(T)	1	1	53
<b>CRYSTALLOGRAPHY</b>				
Laminar Growth of Crystals During Polymorphic Transformation. <u>Yu. V. Mnyukh, N. N. Petropavlov, and A. I. Kitaigorodskii</u> . . . . .	(E)	4	1	80
Dislocations in Quartz Crystals. <u>K. I. Chepizhnyi</u> . . . . .	(E)	8	1	84
Crystal Structure of $CdWO_4$ . <u>A. P. Chichagov, V. V. Ilyukhin,</u> <u>and N. V. Belov</u> . . . . .	(E)	11	1	87
<b>CYBERNETICS AND CONTROL THEORY</b>				
Asymptotic Decoupling of the Equations for a Linear Automatic Control System. <u>K. A. Abgaryan</u> . . . . .	(T)	14	2	301
Sufficient Conditions for Optimality. <u>M. M. Baitman</u> . . . . .	(T)	17	2	305
Structure of Depreciation Deductions in a Steady-State Loaded Machine Yard. <u>L. V. Kantorovich and I. V. Romanovskii</u> . . . . .	(T)	20	2	309
The Laplace-Galois Transform in the Theory of Sequential Machines. <u>Ya. Z. Tsypkin and R. G. Faradzhev</u> . . . . .	(T)	23	3	570
<b>FLUID MECHANICS</b>				
The Influence of Fluctuations in Energy Dissipation on the Shape of Turbulence Characteristics in the Inertial Interval. <u>A. M. Yaglom</u> . .	(T/E)	26	1	49
<b>MATHEMATICAL PHYSICS</b>				
Statistical Properties of a Nonlinear String. <u>F. M. Izrailev</u> <u>and B. V. Chirikov</u> . . . . .	(T)	30	1	57
<b>PHYSICS</b>				
Photoproduction of Mesons on Nucleons and $SU(6)$ Symmetry. <u>A. I. Akhiezer</u> <u>and M. P. Rekalo</u> . . . . .	(T)	33	1	60
Infrared Absorption Spectra of Diamonds with Various Physical Properties. <u>G. O. Gomon and A. A. Shultin</u> . . . . .	(E)	36	1	63
Relation of Absorption and Emission Spectra to Quantum Yield and Fluorescence Lifetime for Molecules. <u>N. A. Borisovich</u> . . . . .	(T/E)	39	2	313
Fluctuations in Photocurrents. <u>M. E. Gertsenshtein</u> . . . . .	(T)	42	2	317
Effective Excitation Cross Sections for the Resonant Doublets of Cesium and Rubidium. <u>I. P. Zapesochnyi and L. L. Shimon</u> . . . . .	(E)	44	2	320
Empty Space-Time with an Absolutely Parallel Vector Field. <u>V. D. Zakharov</u> .	(T)	47	2	324
The Lengths of Molecular Whiskers giving Molecular Patterns in the Field-Emission Microscope. <u>A. P. Komar</u> . . . . .	(T/E)	50	2	327

Copyright © 1966 by the American Institute of Physics, Incorporated

Available From American Institute of Physics  
Vol. XI, No 1, July 1966

CONTENTS (continued)

		PAGE	RUSS. ISSUE	RUSS. PAGE
Energy Spectrum of Ions Scattered by Single Crystals. <u>E. S. Maashkova, V. A. Molchanov, E. S. Parilla, and N. Yu. Turaev</u> . . . . .	(E)	52	2	330
Quantum Theory of Anisotropic Ferromagnetism. <u>W. Rybarska</u> . . . . .	(T)	54	2	333
Relation Between Structure and Polarization of Particles in the Reactions $l + l \rightarrow p + p$ . <u>A. A. Sokolov, B. K. Kerimov, I. G. Dzhafarov, and R. Sh. Yakh'yaev</u> . . . . .	(T)	57	2	337
Analysis of the Quasiclassical Equations for a Two-Level System, without Taking Relaxation Effects into Consideration. <u>Yu. A. Freiman and B. L. Timan</u> . . . . .	(T)	60	2	341
Propagation of High-Frequency Signals in a Medium with Random Characteristics. <u>D. I. Blokhintsev</u> . . . . .	(T)	63	3	574
Relaxation in Line Spectra in an Instantaneous-Collision Approximation. <u>A. I. Burshtein</u> . . . . .	(T)	65	3	577
Motion of a Quasiclassical Particle in a Quasiperiodic Potential. <u>G. M. Zaslavskii and A. M. Fridman</u> . . . . .	(T)	68	3	580
The Einstein Equations as Equations for a Massless Tensor Field with Spin 2. <u>V. I. Ogievetskii and I. V. Polubarinov</u> . . . . .	(T)	71	3	584
On the Equilibrium Form of a Twin Undergoing Retardation at an Obstacle. <u>V. P. Soldatov and V. I. Startsev</u> . . . . .	(E/T)	75	3	588
<b>TECHNICAL PHYSICS</b>				
The Relationship between the Critical Breaking Stresses and the Time of Failure as a Result of the Explosive Stressing of Metals. <u>L. V. Al'tshuler, S. A. Novikov, and I. I. Divnov</u> . . . . .	(E)	79	1	67
The Nature of the Plasticity of Mo-Re Alloys. <u>Yu. I. Demkin</u> . . . . .	(E/T)	83	1	71
The Interaction of Rough Surfaces Under Friction and Wear. <u>V. S. Radchik</u> . . . . .	(E)	86	1	74
Preferred Crystallization in Graphitic Materials. <u>A. S. Fialkov, Ya. G. Davidovich, and I. M. Yurkovskii</u> . . . . .	(E)	88	1	77
X-Ray Determination of the Elastic Constants of Pure Nickel and Its Alloy with Aluminum. <u>E. Z. Vintalkin</u> . . . . .	(E)	91	2	345

Available From American Institute of Physics  
Vol. XI, No 1, July 1966

# TELECOMMUNICATIONS and RADIO ENGINEERING

1966

NUMBER 1

## CONTENTS

### PART 1

#### ELEKTROSVYAZ

Vol XX, No 1, 1966

	Page
A. F. Plonskiy and Yu. K. Filipekiy: Spectral Composition of the Signal from a Pulse-Excited Quartz Oscillator .....	1
A. A. Shur: Calculation of the Loss in Antenna Gain for Long-Range Tropospheric Propagation of Ultra-Short Waves .....	5
B. Yu. Levkov: Nonlinear Distortion of an FM Signal in a Limiter .....	11
M. E. Movshovich: Frequency Converters Using Transistors Operating in the Switching Mode .....	17
A. K. Losev: Single-Section Tuning-Fork Filters .....	23
A. S. Sadovskiy: Modern Telephone Sets .....	28
N. N. Cherepov: Basic Characteristics of a Binary Data Transmission System with Composite Data Feedback .....	37
M. A. Bykhovskiy: Analysis of the Noise Immunity of Summation Codes in Transmission Systems with Interrogation .....	47
P. A. Frolov and G. P. Nikolayev: Results of a Study of the Temperature Coefficient of Attenuation of MKTP-4 Cable Coaxial Pairs .....	52
<b>BRIEF COMMUNICATIONS</b>	
A. A. Voronin: Correlation Treatment of Noise-Immune Coding .....	56
V. I. Nazarov: Separation of the Sync Pulses from an RPT Signal "With Rotating Phase" .....	59
V. Ya. Spirin and V. A. Styblik: Tunnel Diode Mixers, With or Without Separate Local Oscillator .....	61
I. I. Grodnev and L. V. Novosheleva: Microwave Electromagnetic Field Screening ..	64
<b>INFORMATION</b>	
A. V. Gavrilov: Meeting of the A. S. Popov Society .....	66
In Our Forthcoming Issues .....	67
New Books .....	68

### PART 2

#### RADIOTEKHNIKA

Vol XXI, No 1, 1966

Ye. P. Korchagina: Calculation of Reliability Parameters for Systems with Repairable Elements .....	69
<b>DISCUSSION</b>	
I. M. Kogan: Is Telepathy Possible? .....	75
V. A. Geranin, V. V. Dugin and V. M. P'yanov: Spectra of Time-Limited Gaussian and Sin x/x Video Pulses .....	81
Ya. V. Pimenov and G. V. Kiseleva: Effect of a Circular Edge of an Ideally Conducting Body on the Diffraction Field .....	86
Yu. Ya. Drugov: Tuned Amplifier with Electronic Bandwidth Control .....	90
V. Z. Tikhonov and V. T. Goryainov: Detection of Random Signals .....	93
L. G. Maloratskiy: Effect of an Interfering Signal on a Synchronised Oscillator .....	106
S. S. Karastakiy and A. F. Yemel'yanov: Experimental Investigation of Reflex Klystron Oscillation Fluctuations .....	111

(Continued)

Available From the Institute of Electrical and Electronics Engineers

PART 2  
RADIOTEKHNIKA  
 Vol. XXI, No. 1, 1966

	Page
G.A. Zabirow: Open-Core Ferromagnetic Short-Pulse Generator .....	115
N.N. Pershin: Dependence of the Loss in Toroidal Coils on Coil Former Shape ....	117
Yu. P. Pyatoshin: On the Possibility of Tuning an Instrument .....	120
<b>BRIEF COMMUNICATIONS</b>	
N.I. Chistyakov: Diode Frequency Converter Parameters .....	124
Sh. L. Bebiashvili and O. M. Namicheyshvili: Estimating the "Reliability Cost" in Complex Systems .....	125
I.S. Oreshkov: Choosing the Minimum Noise Temperature of RF-Amplifier in Microwave Receivers .....	126
N.N. Krasil'nikov: Television-System Fidelity Criterion for Noise-Immunity Investigations .....	127
Yury Borisovich Kobzarev (On His 60th Birthday) .....	129
Pavel Vasil'yevich Shmakov (On His 80-th Birthday) .....	130
New Books .....	131

Available From the Institute of Electrical and Electronics Engineers

# Soviet Physics SOLID STATE

A Translation of "Fizika Tverdogo Tela"

(Russian Original Vol. 8, No. 1, pp. 3-297, January, 1966)

Vol. 8, No. 1, pp. 1-250

July, 1966

## CONTENTS

	PAGE	RUSS. PAGE
Ionization Currents in Diamonds During Irradiation with 500-1000 keV Electrons. <u>E. A. Konorova, S. F. Kozlov, and V. S. Vavilov</u> . . . . .	(E) 1	3
Concentration and Energy of Formation of Vacancies in Niobium, Measured by the Method of Mixtures. <u>V. Ya. Chekhovskoi and I. A. Zhukova</u> . . . . .	(E) 6	9
Field Effect and Surface States at the Boundary of Germanium and an Electrolyte. <u>O. V. Romanov and P. P. Konorov</u> . . . . .	(E) 9	13
A Gallium Arsenide Electron Beam Injection Laser. <u>N. G. Basov,</u> <u>O. V. Bogdankevich, and B. M. Lavrushin</u> . . . . .	(E) 15	21
Electromagnetic Wave Amplification in a Solid-State Plasma. <u>V. G. Veselago,</u> <u>M. V. Glushkov, and A. A. Rukhadze</u> . . . . .	(T) 18	24
The Effect of Plastic Deformation on the Thermal Conductivity of NaCl and KCl Single Crystals. <u>I. A. Smirnov</u> . . . . .	(E) 21	28
Effect of a Constant Electric Field on the Absorption of Ultrasound Near the Curie Point in Triglycine Sulfate Crystals. <u>K. A. Minaeva and B. A. Strukov</u> . . . . .	(T/E) 24	32
Investigation of the Mechanism of Bulk Condensation of Cd, Zn, and Mg. <u>L. S. Palatnik, G. V. Fedorov, and P. N. Bogatov</u> . . . . .	(E) 27	36
Experimental Proof of the Existence of Strictly Cubic Centers in a $\text{CaF}_2\text{-Eu}^{2+}$ Crystal. <u>B. P. Zakharchenya and I. B. Rusanov</u> . . . . .	(E) 31	41
A Study of Magnetization Reversal in Uniaxial Ferromagnets (A New Type of Hysteresis). <u>E. V. Shtol'ts and Ya. D. Fel'dman</u> . . . . .	(E) 34	45
Dynamics of Crystals having the $\text{KH}_2\text{PO}_4$ Structure. <u>M. S. Shur</u> . . . . .	(T) 43	57
Investigation of the Characteristic Temperature of Molecular Crystals. Scalar Derivatives of the Characteristic Temperature. <u>A. I. Kitaigorodskii</u> and <u>B. D. Koreshev</u> . . . . .	(T) 47	62
A Method for Determining the Lifetime of Excess Carriers in Monopolar Photoconductors. <u>V. E. Lashkarev, V. K. Malyutenko, and V. A. Romanov</u> . . . . .	(T/E) 51	67
Nuclear Doping and Optical Properties of Indium Antimonide. <u>L. K. Vodop'yanov</u> and <u>N. I. Kurdiani</u> . . . . .	(E/T) 55	72
Collective Energy Losses in an Electron Avalanche. <u>B. Ya. Yurkov</u> . . . . .	(T) 59	77
Dynamic Narrowing of Paramagnetic Resonance Lines in a Compensated Semiconductor. <u>L. V. Keldysh and T. T. Tratas</u> . . . . .	(T) 64	83
New Emission Bands of Re, W, Ta, Te, Sb, Pd, Mo, Nb, and Ti in the Ultrasoft X-Ray Region of the Spectrum. <u>A. P. Lukirskii, I. A. Brytov,</u> and <u>V. A. Fomichev</u> . . . . .	(E) 72	95
Effect of Pressure on the Electric Properties of PbTe. <u>A. A. Averkin</u> and <u>P. G. Dermenshi</u> . . . . .	(E) 79	103
The Electro-Optic Properties of Single Crystals of Barium Titanate. <u>V. E. Perfilova and A. S. Ronin</u> . . . . .	(E) 82	107

(Continued)

Copyright © 1966 by the American Institute of Physics, Incorporated

Available From the American Institute of Physics  
Vol VIII, No 1, July 1966

CONTENTS (continued)

	PAGE	RUSS. PAGE
Excitation of Electrons in Germanium by Alkali-Metal Ions. <u>I. A. Abroyan, G. N. Makarova, A. I. Pukhanskii, and A. I. Titov</u> . . . . .	(E) 85	111
Superaturated Solid Solutions of Cu <sub>2</sub> S and ZnS and Their Luminescent Properties. <u>A. A. Buzin and A. V. Vukhnyakov</u> . . . . .	(E) 88	115
Electrical Conductivity of n-Ge in Strong uhf Electric Fields. <u>A. B. Davydov and I. M. Tsilul'kovskii</u> . . . . .	(E) 92	120
Excitation of Galvanomagnetic and Coupled Galvanomagneto-Acoustic Waves in an Electric Field. <u>L. É. Gurevich, I. V. Ioffe, and A. M. Kovnatskii</u> . . . . .	(T) 95	124
Preparation of Filamentary NaCl and KCl Crystals from the Gas Phase. <u>S. U. Gol'denberg and A. F. Churakov</u> . . . . .	(E) 100	131
Low-Frequency Photocurrent Noise in Cadmium Sulfide Single Crystals. <u>N. B. Luk'yanchikova and M. K. Shuinkman</u> . . . . .	(E) 102	134
Investigation of the Centers of CaF <sub>2</sub> :Gd <sup>3+</sup> with Positive Compensators. <u>F. Z. Gil'fanov, L. D. Livanova, and A. L. Stolz</u> . . . . .	(E) 108	142
Photoconductivity and Nonequilibrium Carrier Lifetime During the Phase Transition in SUS. <u>V. N. Nosov and V. M. Fridkin</u> . . . . .	(E) 113	148
Influence of Additive Impurities on the Local Vibrations of Hydrogen in a KCl Crystal. <u>D. N. Mirlin and I. I. Reshina</u> . . . . .	(E) 116	152
Effect of Temperature and Doping on the Reflection Spectrum in InSb. <u>M. L. Belle and V. V. Galanov</u> . . . . .	(E) 122	159
Change in the Width of the Forbidden Band of Silicon in the Electric Field of a p-n Junction. <u>K. I. Britsyn and A. A. Smirnov</u> . . . . .	(E/T) 126	163
Appearance and Motion of Dislocations in NaCl Crystals Under the Action of Thermoelastic Stresses. <u>N. V. Zagorulko, B. A. Reznikov, N. A. Tyapunina, and N. I. Khamidova</u> . . . . .	(E) 129	166
Problem of the Metallization of CsI Under the Action of Pressure. <u>Yu. A. Pospelov and N. N. Kuzin</u> . . . . .	(E) 134	172
Discontinuities in the Specific Heats of Antiferromagnetic Carbonates. <u>I. N. Kalinkina and V. N. Kostyukov</u> . . . . .	(T/E) 137	176
Theory of Interband Magneto-Optical Absorption in the Case of Scattering by Impurities. <u>I. I. Korovin and E. V. Kharitonov</u> . . . . .	(T) 141	181
Disappearance of Impurity Levels in Germanium at High Injection Levels. <u>A. A. Rogachev and N. I. Sablina</u> . . . . .	(E) 146	187
Widening of Infrared Absorption Lines by Local High-Frequency Oscillations. <u>M. A. Ivanov, M. A. Krivoglas, D. N. Mirlin, and I. I. Reshina</u> . . . . .	(T/E) 150	192
Recombination of Electrons at Zinc Atoms in p-Type Silicon. <u>B. V. Kornilov</u> . . . . .	(E) 157	201
Influence of Deformation on the Properties of Silicon p-n Junctions. <u>A. M. Polyakova and V. V. Sklovskaya-Kordt</u> . . . . .	(E) 163	208
Structures of Mixed Crystals Based on CaF <sub>2</sub> , SrF <sub>2</sub> , and BaF <sub>2</sub> . <u>É. G. Chernetskaya and G. V. Anan'eva</u> . . . . .	(E) 169	216
Anisotropy of the Bara-Process Magnetoresistivity Effect in Hexagonal Ferrites. <u>K. P. Belov and L. I. Koroleva</u> . . . . .	(E/T) 172	220
The Semimetal-Dielectric Phase Transition. <u>Yu. V. Kopaev</u> . . . . .	(T) 175	223
BRIEF COMMUNICATIONS		
EPR of Mn <sup>2+</sup> Ions in MgF <sub>2</sub> . <u>M. M. Zaripov, V. S. Kropotov, and L. D. Livanova</u> . . . . .	(E/T) 181	231
On a Possible Method of Obtaining Negative Conductivity in a Metal-Semiconductor-Metal System. <u>L. S. Gasanov</u> . . . . .	(T) 184	233
The Fermi Surface and Thermoelectric Power in Copper. <u>I. V. Abarenkov and M. V. Federnikoy</u> . . . . .	(T) 186	236
EPR of Gd <sup>3+</sup> in Yttrium and Lanthanum Double Molybdates. <u>M. M. Zaripov, L. D. Livanova, V. G. Stepanov, and M. L. Fallin</u> . . . . .	(E) 188	238

(Continued)

**CONTENTS (continued)**

	PAGE	RUSS. PAGE
Determination of the Short-Range Order Parameters in Lead Chalcogenides by the Method of Diffuse X-Ray Scattering. <u>A. I. Inyutkin, L. I. Kleshchinskii, and P. V. Sharavskii</u> . . . . .	(E) 190	240
Determination of the Polarization Energy of an NaCl Crystal in the Presence of a Positive Ion Vacancy. <u>B. I. Gorbachenko and K. B. Tolpygo</u> . . . . .	(T) 192	242
Hall Effect in Heavily Doped n-Type Indium Antimonide Crystals with a Mixed Impurity Scattering Mechanism. <u>V. V. Galavanov, D. N. Nasledov, and A. S. Filipchenko</u> . . . . .	(T) 195	244
EPR Spectrum of $Gd^{3+}$ in $CdMoO_4$ . <u>V. F. Dernov-Pegarev, M. M. Zaripov, M. I. Samoilovich, and V. G. Stepanov</u> . . . . .	(E) 197	247
Temperature Dependences of the Elasticity Moduli of Crystalline Ammonia. <u>D. N. Bol'shutkin and A. I. Prokhvatilov</u> . . . . .	(E) 198	248
Negative Conductance in Nickel-Doped Germanium. <u>D. A. Kichigin and V. P. Lobachev</u> . . . . .	(E) 200	249
Calculation of the Diamagnetic Susceptibility in the Statistical Model. <u>R. I. Anishchenko, A. P. Nikolaev, and A. N. Men'</u> . . . . .	(E/T) 202	251
Optical Absorption in Gallium Arsenide which has been Irradiated by High Integrated Fluxes of Fast Neutrons. <u>L. K. Vodop'yanov and N. I. Kurdiani</u> . . . . .	(E) 204	254
Concerning the Interaction of Lithium with Lattice Defects in Cadmium Telluride. <u>B. M. Vul and V. A. Chapnin</u> . . . . .	(E/T) 206	256
Study of Antiferroelectrics having the Perovskite Structure in the Microwave Region. <u>N. P. Khuchua and V. A. Evseev</u> . . . . .	(F) 208	258
Magnetic Properties of NiO - MgO Solid Solutions. <u>S. M. Ariya and N. L. Lukinykh</u> . . . . .	(E) 210	260
EPR of $Gd^{3+}$ in $ SrWO_4$ . <u>M. M. Zaripov, A. A. Manenkov, and G. K. Chirkin</u> . . . . .	(E) 212	262
Certain Properties of the High-Voltage Photoelectric Effect in Thin CdTe Layers. <u>M. I. Korsunskii and V. M. Fridman</u> . . . . .	(E) 213	263
Magnetic Properties of $YMnO_3$ . <u>S. A. Kizhaev, V. A. Bokov, and O. V. Kachalov</u> . . . . .	(F) 215	265
The Magnetic Properties of $BiFeO_3$ . <u>V. M. Yudin</u> . . . . .	(E) 217	267
Investigation of the Cation Distribution in Barium Hexaferrites. <u>M. A. Vinnik, A. P. Erastova, and Yu. G. Saksonov</u> . . . . .	(E) 219	269
Temperature Dependence of the Intensity of Scattered Light in Oriented Single Crystals of $KH_2PO_4$ and Rochelle Salt. <u>I. M. Aref'ev, P. A. Bazhulin, I. V. Gavrilova, and I. S. Zheludev</u> . . . . .	(E) 222	272
Acoustic Instability in a Semiconductor with Negative Differential Conductivity. <u>E. M. Epahtsin</u> . . . . .	(T) 224	274
Emission of Hot Electrons from Thin Metal Films. <u>P. M. Tomchuk and R. D. Fedorovich</u> . . . . .	(E) 226	276
Electrophysical Properties of Thin Silicon Specimens. <u>Yu. A. Kontsevoi and M. I. Malyshev</u> . . . . .	(E) 228	278
Negative Photoconductivity of Gold-Doped Germanium in Strong Electric Fields. <u>I. Z. Karimova, V. P. Sondaevskii, and V. I. Stafeyev</u> . . . . .	(E) 230	280
Vacancy Formation in Zirconium. <u>O. M. Kanel' and Ya. A. Kraftmakher</u> . . . . .	(E) 232	283
Current Oscillations in the Presence of Acoustic Instability. <u>L. E. Gurevich and I. V. Ioffe</u> . . . . .	(T) 234	284
Electron-Bombardment-Induced Stimulated Emission from Cadmium Selenide. <u>E. L. Nolle, V. S. Vavilov, G. P. Golubev, and V. S. Mashtakov</u> . . . . .	(E) 236	286
Application of the Mössbauer Effect to the Investigation of Solid Solutions of Sn in Oxide Semiconductors. <u>A. N. Karusev, L. Ya. Margolis, and L. S. Polak</u> . . . . .	(E) 238	287
Thermal Conductivity of Gallium Antimonide in the Liquid and Solid State. <u>Kh. I. Amirkhanov and Ya. B. Magomedov</u> . . . . .	(E) 241	290
Space-Charge Limited Currents in Se Single Crystals. <u>M. Ya. Bakirov and N. Z. Dzhallilov</u> . . . . .	(E) 244	293

(Continued)

Available From The American Institute of Physics  
Vol VIII, No 1, July 1966

FIZIKA TVERDOGO TELA  
Vol VIII, No 1, 1966

CONTENTS (continued)

		RUSS.
	PAGE	PAGE
Nonparabolicity of the Conduction Band of Lead Telluride. <u>M. K. Zhittinskaya,</u> <u>V. I. Kudanov, and I. A. Chernik</u> . . . . .	(E) 246	295

Available From The American Institute of Physics  
Vol VIII, No 1, July 1966

# GENETICS

No 4, 1966

- USSR -

[Following is the cover-to-cover translation of the Russian-language periodical Genetika (Genetics), Moscow, No 4, April 1966, pages 1 -- 192. Other bibliographic information accompanies each article.]

## CONTENTS

	Page Source	Report
Nikolay Nikolayevich Semenov	3	1
Retention of Radiation Lesions to Chromosomes in Fish Embryogenesis [D. D. Romashov, V. N. Belyayeva]	4	3
The Effectiveness of Mass-Scale and Individual Selection in Pisciculture [V. S. Kirpichnikov]	16	23
Accessory (B) Chromosomes in Black Flies (Simuliidae, Diptera) and Their Adaptive Significance (The Problem of Genome Microevolution) [Ye. S. Shcherbakov]	26	39
The Radiosensitivity and Distinctions of Mutability of Mouse Embryo Fibroblasts Irradiated at Different Phases of the Mitotic Cycle [Yu. A. Mitrofanov]	31	46
The Appearance of Lethal Mutations in The Heterochromatic Region of the X-Chromosome of <i>Drosophila melanogaster</i> as Correlated with Pre-Radiation Cultivation Temperature [Z. M. Kogan]	38	56

(Continued)

Available From JPRS 36631

	Page	Report
	Source	
Karyotype Mutations and Aging [Yu. S. Bocharov, G. A. Vilkina]	45	67
Comparative Radiosensitivity of Chromosomes in Cultured Peripheral Blood Leukocytes of Normal Donors and Patients with Down's Syndrome [A. P. Chudina, T. S. Malyutina, Ye. Ye. Pogonyants]	51	74
Genetic Analysis of Fertility Restorers in the Risovaya-645 Variety of Maize [Z. S. Nikoro, A. N. Sidorov]	64	92
Investigation of Selective Fertilization in Risovaya-645 Variety of Maize [S. I. Maletskiy, Ye. V. Polovinkina]	74	106
A Photosynthetic Mutant of <i>Pisum Sativum</i> [S. A. Gostimskiy]	80	114
Analysis of the Possibility of Selection for Increased Fertility of Constant 56-Chromosome Wheat-Agropyron Hybrids [I. N. Golubovskaya, Z. S. Nikoro, V. V. Khvostova]	86	123
Polyploidy and Aneuploidy in Onion Roots under the Influence of Physiologically Active Substances in Mistletoe ( <i>Viscum Album</i> L.) Extract [G. Akatriney]	97	139
The Influence of Temperature on Repair of Radiation-Induced Chromosomal Injuries in the Pea [P. D. Usmanov]	105	150
Hybridization as a Method of Increasing the Breeding Value of Tetraploid Rye [A. A. Torop, V. P. Pakhomova]	114	163
Genetic Coding of Protein Structure. Communication II [5] [M. V. Vol'kenshteyn]	119	170
Phage-Resistant Mutants of <i>Actinomyces Erythreus</i> Induced By Different Mutagens [M. V. Torosyan]	123	176
Lysogeny of Phage-Resistant Strains of <i>Actinomyces Erythreus</i> Induced by Mutagens [M. V. Torosyan]	130	186

(Continued)

Available From JPRS 36631

	Page Source      Report
Post-Radiation Recovery of Yeast Cells from Dominant Lethals During Temporary Delay in Reproduction [V. S. Barsukov, O. V. Malinovskiy, N. M. Mityushova]	136      196
Chemical Mutagens: Investigation of Muta- genic Activity of Derivatives of Ethylen- imine, Urethylanes, Nitrosourethylanes and Diazoketones an Actinomyces Streptomycini Kras. and Drosophila Melanogaster. Communication III. [Yu. E. Bartoshevich, L. M. Filippova, R. G. Kostyanovskiy]	147      211
<b>BRIEF REPORTS</b>	
Method of Introducing Chemical Mutagens Into the Conduction System of Woody Plants [G. F. Privalov, N. S. Shchapov]	156      223
<b>BREEDING METHODS</b>	
One of the Means of Improving the Initial Stages of the Breeding Process	158      226
<b>BOOK REVIEW</b>	
Plant Breeding [V. Ya. Dishler]	167      239
Bibliography of Foreign Literature on Genetics (15 to 31 December, 1965)	169      243
<b>LETTERS TO THE EDITOR</b>	
Regarding the Review by V. P. Efroimson of the Book, <u>Genetics of Bacteria</u> , by N. N. Zhukov-Vereshnikov and A. P. Pekhov [A. P. Pekhov]	182      260
In Memoriam: Boris Nikolayevich Vasin (1897 -- 1963) [unsigned]	185      265

Available From JPRS 36631

**ГЕОДЕЗИЯ И КАРТОГРАФИЯ****№ 4, 1965****English Edition of  
Geodesy and Aerophotography, No. 4, 1965****CONTENTS**

	<b>English Page</b>	<b>Russian Page</b>
<b>A. A. Izotov: The Laplace Equation in a Triangulation Chain . . . . .</b>	<b>213</b>	<b>3</b>
<b>V. G. Zdanovich: Error Accumulation in Continuous Triangulation Networks Constructed from Triangles of Arbitrary Shape . . . . .</b>	<b>214</b>	<b>7</b>
<b>A. I. Bolotin: A Method of Obtaining the Minimum Sum of Absolute Quantities Linearly Dependent on a Series of Arguments . . . . .</b>	<b>217</b>	<b>15</b>
<b>I. Ye. Donskih: Provision of Horizontal Geodetic Control for the Construction and Determination of Horizontal Displacements of the Concrete Pressure Structures of a Hydroelectric Power Installation . . . . .</b>	<b>221</b>	<b>23</b>
<b>V. A. Kolihayev: Determination of the Velocity of Light from Measurements with (Pulsed) Light Rangefinders on Control Bases . . . . .</b>	<b>228</b>	<b>39</b>
<b>Yu. K. Neumyvakin: An Algorithm for Electronic Computer Determination of the Projected Surface of Areas to be Irrigated . . . . .</b>	<b>231</b>	<b>43</b>
<b>O. A. Mozshukhin: A Study of Refractive Index Stratification in the Surface Boundary Layer of the Atmosphere . . . . .</b>	<b>234</b>	<b>49</b>
<b>Yu. I. Markuze: Polygonometric Traverse Adjustment by the Two-Group Method, Both Rigorous and Approximate . . . . .</b>	<b>236</b>	<b>55</b>
<b>Yu. M. Neyman: Analysis of Geodetic Constructions . . . . .</b>	<b>240</b>	<b>63</b>
<b>V. D. Petrov: Use of Mean Level Surfaces in Processing Leveling Results . . . . .</b>	<b>246</b>	<b>77</b>
<b>Ya. G. Muralev: Use of M. S. Molodenskiy's Integral Formulas to Determine the Coordinates of an Astrogeodetic Network Station . . . . .</b>	<b>249</b>	<b>85</b>
<b>F. F. Lyenko, V. D. Mar'yasov, and A. N. Makarenko: Spatial Triangulation from Convergent Photographs . . . . .</b>	<b>255</b>	<b>97</b>
<b>Yu. L. Biryukov: Methodological Aspects of the Automation of Interpretation . . . . .</b>	<b>259</b>	<b>105</b>
<b>I. S. Garelik: The Theory of Compiling Stereopairs Obtained on an Electron Microscope . . . . .</b>	<b>260</b>	<b>109</b>
<b>G. A. Meshcheryakov: The Problem of Choosing the Most Advantageous Projections . . . . .</b>	<b>263</b>	<b>115</b>
<b>Yu. I. Bespalov: The Problem of a Non-Wettable Coating in a Liquid-Filled Compensator . . . . .</b>	<b>269</b>	<b>129</b>
<b>V. S. Usov: The Refocusing Error in Checking Rectilinearity by the Method of Autocollimation of Converging Rays . . . . .</b>	<b>270</b>	<b>133</b>
<b>A Conference on the Applications of Geodesy in Construction . . . . .</b>	<b>272</b>	<b>137</b>
<b>Afanasii Il'ich Agroskin . . . . .</b>	<b>273</b>	<b>140</b>
<b>Leonid Fedorovich D'yachenko (Obituary) . . . . .</b>	<b>275</b>	<b>143</b>

English edition published, June 1966

**Available From the American Geophysical Union**

## LABOR HYGIENE AND OCCUPATIONAL DISEASES

(Vol X, No 4, 1966)

USSR

Following is a complete translation of the Russian-language journal Gigiyena Truda i Professional'nyye Zabolevaniya (English version above), Vol X, No 4, Moscow, April 1966. Authors' names and original page numbers are cited with each article.

### TABLE OF CONTENTS

	<u>Page</u>
Lead in the Air of Some Georgian Coal Mines	1
Bone Changes in the Spine of Concrete Workers Exposed to General High-Frequency Vibration	5
Clinical and Dosimetric Data on Personnel Operating a 10 Gev Synchrophasotron	10
Comparison of Pathogenic Mine Dust of Mixed Composition	18
Pathogenic Properties of Vanadium, Ferro- vanadium, and Vanadium Carbide Dust	25
Toxicity of Some Active Dyes and Health Measures to Improve the Working Conditions of Those Producing Them	32

(Continued)

Available From JPRS 36341

CONTENTS (continued)	<u>Page</u>
Effects of Chronic Gasoline Poisoning on the Sensitivity of White Mice to Some Unfavorable Factors	39
Content of Blood Mediators in Persons Ex- posed to Low Concentrations of Petroleum Hydrocarbons	45
Clinical Aspects of Manganese Poisoning in Electric Welders	52
Cytochemical Studies on Basophilic Granular Erythrocytes in Lead Poisoning	55
Newly Revised Table of Maximum Permissible Concentrations of Industrial Substances in Sanitary Standards for Designing Industrial Plants (Sanitary Standard 245-63)	64
Ionic Composition of the Air in Mines	72
Occupational Lung Diseases in Grain Elevator Workers	76
Clinical Symptoms of Bakelite Varnish Poisoning	80
Vascular Disorders in Persons Handling Coolants (Sodium Nitrite and Triethanol- amine)	82
Comparative EKG Characteristics in Various Tests of Cardiovascular Function	85
Involvement of the Peripheral Nervous Sys- tem in Chronic Fluorosis	87
Quantitative Determination of Oxalic Acid in Urine	88
Role of Preliminary Adaptation to Hypoxia in X-Irradiation not Exceeding 60 r	90

(Continued)

Available From JPRS 36341

**GIGIYENA TRUDA I PROFESSIONAL'NIYE ZABOLEVANIYA**  
**Vol X, No 4, 1966**

**CONTENTS (continued)**

**Page**

Comparative Toxicity of the Antiscorchings Phthalic Anhydride and N-Nitrosodiphenyl- amine (Vulcalent A)	92
A Method of Determining Mesidine in the Air	95
H. Jänes. <u>F88stush88gien</u> (Industrial Hygiene) -- Book Review --	97
S. M. Levin. <u>Profilaktika travmatizma v les- noy promyshlennosti i pervaya pomoshch' pri travmakh</u> (Prevention of Accidents in the Lumber Industry and First Aid in Accidents) -- Book Review --	99

**Available From JPRS 36341**

**Izvestiya Akademii Nauk SSSR, Atmosfera i Okeanologicheskiy**  
**Vol. 1, No. 12, 1965**

English Edition of  
 Izvestiya, Academy of Sciences, USSR, Atmospheric and Oceanic Physics Series No. 12, 1965

**CONTENTS**

	<b>Page</b>	
	<b>English</b>	<b>Russian</b>
B. L. GAVRILIN, Numerical Experiments on the General Circulation of the Atmosphere .....	723	1229-1259
G. P. KURBATKIN, On the Changes in the Kinetic Energy of Atmospheric Motions .....	742	1260-1269
G. V. ROZENBERG (ROSENBERG), A. B. SANDOMIRSKIY, AND G. I. TRIFONOVA, The Brightness Profile of the Daytime Horizon of the Planet Earth...	747	1270-1278
G. I. GORCHAKOV, AND G. V. ROZENBERG (ROSENBERG), Measurements of the Light Scattering Matrix of the Atmospheric Surface Layer .....	752	1279-1288
V. M. VOLOSHCHUK, Critical Conditions of Inertial Settling of Aerosols from Symmetrical Flows .....	757	1289-1298
B. I. STYRO, E. YU. VERRA, AND K. K. SHOPAUSKAS, Determination of Certain Parameters of the Removal of Natural Radioactive Aerosols from Air .....	763	1299-1309
A. G. KOLESNIKOV, N. A. PANTALEEV AND V. N. IVANOV, Experimental Studies of the Turbulent Layer Under Drift Ice .....	769	1310-1318
S. A. KITAI'GORODSKIY AND YU. A. VOLKOV, Calculation of Turbulent Heat and Humidity Fluxes in an Atmospheric Layer Near a Water Surface .....	774	1319-1336

**SHORT REPORTS**

YU. M. TIMOFEEV, On the Applicability of the Model of an Isolated Spectral Line .....	784	1337-1339
---	-----	-----------

**Available From The American Geophysical Union**

English Edition Published April 1966

**IZVESTIYA AKADEMII NAUK SSSR, SERIYA FIZICHESKAYA**  
**No 12, 1965**

English Edition of  
 Izvestiya, Academy of Sciences, USSR, Physics of the Solid Earth Series No. 12, 1965

**CONTENTS**

	Page	
	English	Russian
<b>E. I. GAL'PERIN (HALPERIN), The Study of Multiply-Reflected Waves in Vertical Seismic Profiling</b> .....	775	1-12
<b>T. G. IVANOVA, On Converted Waves formed by a Thin Layer</b> .....	785	13-20
<b>G. M. VOSKOBOINIKOV AND M. I. SIROTIN, On the Determination of the Singularities in the Analytic Continuation of Potential Fields</b> .....	790	21-30
<b>I. P. NEDYALKOV, The Separation of Potential Fields</b> .....	796	31-44
<b>K. A. VALEEV AND E. I. PARKHOMENKO, Electrical Properties of Rocks in Constant and Alternating Electric Fields</b> .....	803	45-52
<b>Scientific Reports</b>		
<b>L. I. BOKANENKO, Determining the Frequency Characteristics of Ultrasonic Pickups</b> .....	807	53-55
<b>V. A. TULIN, Pulse-Number Coding Method for Gravimeter Signals</b> .....	810	56-61
<b>G. N. ANISHCHENKO, On the Principles of Complex Interpretation of MTP-Curves in Areas with Inclined Reference Horizon</b> .....	815	61-66
<b>Chronicle</b>		
<b>I. GUBIN, On the Organization of the Investigations for the Study of the Seismicity of the Baltic Shield</b> .....	819	67

**Available From The American Geophysical Union**

English Edition Published April 1966

## CLINICAL MEDICINE

(Vol. XLIV, No. 2, 1966)

Following is a complete translation of the Russian-language periodical Klinicheskaya Meditsina (English version above), Vol. XLIV, No. 2, February 1966, Moscow. Names of authors of the articles and original page numbers are cited with each article.

### CONTENTS

	<u>Page</u>
The Nephrotic Syndrome .....	1
Some New Data Concerned with the Investigation of the Motor Function of the Esophagus .....	17
The So-Called Periodic Disease in the Theoretical and Practical Aspect .....	34
Intrathoracic Shunting of the Esophagus with a Segment of the Large Intestine in Cicatricial Stricture .....	46
Changes of the Vegetative Nervous System in Functional Diseases of the Esophagus .....	55
Partially Acid and Alkaline Secretion of the Stomach in Pathology .....	60
Tuberculous Affection of the Stomach and Duodenum .....	72
The Clinical Picture of Chronic Hepatopancreatic Insufficiency and the Principles of Its Treatment ....	76
Remote Observations of Patients Who Have Sustained Acute Pancreatitis .....	88
	(Continued).

Available From JPRS 36283

**KLINICHESKAYA MEDITSINA**  
**Vol XLIV, No 2, 1966**

<u>Contents (Continued)</u>	<u>Page</u>
Reactions and Complications After Splenoportography ....	101
Confrontation of the Results of Cytological Investigation of the Spleen and Splenomanometry in Portal Hypertension .....	106
New Data on the Pathogenesis and Treatment of Pruritus Ani .....	114
Puerperal Hypothyrosis .....	121
A Special Clinical Syndrome -- Longing for Drugs .....	130
Features Peculiar to the Clinical Course of Asian Influenza During the 1965 Epidemic .....	136
The Treatment of Severe Forms of Tetanus By Means of Prolonged Barbiturate Anesthesia .....	144
Assessment of the Functional State of the Myocardium in Hypertensive Vascular Disease .....	150
An Analysis of the Duration of Systolic Phases in Aortic Diseases .....	162
EKG Changes in Persons Stricken by Lightning .....	170
Rheumatic Pancreatitis .....	173
Hemorrhagic Vasculitis in a Patient with Diabetes Mellitus .....	177
A Rare Form of Podagra Treated Operatively .....	180
A Rare Case of Congenital Complete Transverse Block of the Heart Existing for 18 Years (Markio's Disease) .....	185
Acute Regional Ileitis .....	189
Bleeding Leiomyoma of the Duodenum .....	194
The Clinical Picture of a Hepatic Form of Late Porphyria Cutanea .....	199
Reiter's Syndrome .....	204
(Continued)	

Available From JPRS 26283

**KLINICHESKAYA MEDITSINA**  
**Vol XLIV, No 2, 1966**

<u>Contents (Continued)</u>	<u>Page</u>
A Rare Case of Severe Carbon Monoxide Poisoning .....	211
Successful Resuscitation After Prolonged Ventricular Fibrillation .....	213
Tumor of the Right Adrenal Gland Penetrating into the Cavity of the Right Atrium Through the Inferior Vena Cava .....	220
Errors in the Diagnosis of Cancer of the Pancreas .....	226
Clinical Peculiarities of Infectious Diseases During World War II .....	235
The Centenary of N. I. Pirogov's "Principles of General Field Surgery" .....	249
To the Editors of the Journal "Klinicheskaya Meditsina" .....	260
A Review of the Bulgarian Book by T. Tashev, G. Mazhdrakov, A. Simeonov, Khr. Brailski, N. Nedkova-Bratanova, V. Yanchev and G. Balabanov "Diseases of the Stomach, Intestine, and Peritoneum" .....	262
A Review of Z. A. Bondar's Book "Jaundice" .....	270
A Review of the Book "Wegener's Granulomatosis" by N. Ye. Yarygin, R. N. Potekhina and T. M. Golikova .....	274
Review of V. M. Karasik's Book "The Past and Present of Pharmacology and Drug Therapy" .....	278
Aleksandr Leonidovich Myasnikov .....	283

Available From JPRS 36283

## CLINICAL MEDICINE

(Vol. XLIV, No. 3, 1966)

Following is a complete translation of the Russian-language periodical Klinicheskaya Meditsina (English version above), Vol. XLIV, No. 3, March 1966, Moscow. Names of authors of the articles and original page numbers are cited with each article.

### CONTENTS

	<u>Page</u>
Certain Types of Cardiac Insufficiency.....	1
The Heart and Vessels.....	13
Present-day Conceptions of Dyspnea.....	19
The Viscous Metamorphosis of Thrombocytes (The Role of Thrombocytes in Hemostasis)...	26
The Therapeutic Action of $\beta$ -Sitosterol in Atherosclerosis (Review of Literature).....	42
Materials for the Clinicogenetic Study of Patients with Thrombosis of Cere- bral Vessels.....	48
Indications and Contraindications for surgical Treatment of Cardiac Aneurysms.....	64
Epileptiform Syndromes in Atrioventricu- lar Block.....	71

(Continued)

Available From JPRS 36288

<b>Contents (Continued)</b>	<b>Page</b>
Certain Methods of Conservative Therapy for Disturbances of Atrioventricular Conduction.....	81
Diagnosis of Mitral Diseases of the Heart by Ultrasonic Cardiography.....	87
Assessment of the Contractile Function of the Myocardium in Coronary-Insuffi- ciency Patients according to the Data of Intracardiac Hemodynamics and Sys- tolic Phase Duration.....	98
Analysis of Systolic Phases in the Heart of Patients with Salmonella-induced Food Poisoning.....	106
Experience in Protracted Anticoagulant Therapy for Coronary-Cardiosclerosis Patients with Angina Pectoris.....	117
The Fibrinolytic Activity of the Blood in Endarteritis Obliterans.....	124
Epileptiform Seizures Accompanying Certain Changes in the Extracranial Branch of the Carotid Arteries.....	130
Neurological Disturbances in Diseases of the Aorta and Major Peripheral Arteries....	135
The Pathogenesis of Cerebral Circulatory Disorders in Hypertensive Disease.....	141
The Effect of Andaxin, Reserpine and Cer- tain Other Pharmacologic Agents on Vas- cular Tone in Neurotic Patients.....	151
Complex Examination of Patients with Thrombo-obliterative Diseases of Vessels of the Limbs.....	157
Vascular Reactions to the Effect of Diadynamic Bernard Currents in Ap- parently Healthy Persons and in Cer- tain Pathological Conditions of the Arterial Vessels of the Limbs.....	167

(Continued)

KLINICHESKAYA MEDITSINA  
Vol XLIV, No 3, 1966

Contents (Continued)	<u>Page</u>
Comparative Evaluation of Functional Tests for Varicose Veins.....	174
Blood-Serum Potassium Content in Certain Diseases of the Cardiovascular System.....	181
Prednisolone Therapy in Cardiac Edema.....	186
The Pathogenesis and Clinical Picture of Cardiac Lesions in Closed Trauma of the Thorax.....	193
The Functional State of the Cardiovascular System in Myasthenia Patients.....	198
Val'dman's Test in Rheumatic Disease.....	203
Diagnosis and Surgical Treatment of Tumors of the Adrenal Cortex Accompanied by Itsenko-Cushing Syndrome.....	206
Facial Migraine.....	217
The Pain Syndrome in the Cardiac Region in Congenital Block of Cervical Vertebrae..	225
Hemorrhage and Anemia in Hiatus Hernia.....	234
Trasilol Treatment of Pancreatitis.....	240
Fatal Outcome Following the Intravenous Injection of Triotrast in Urography.....	247
Stenosis of the Left Atrioventricular Orifice without Left Auricular Enlargement.....	252
Case of a Successful Fight against Clinical Death Due to Ventricular Fibrillation.....	255
The Use of Diuretics in Chronic Circulatory Insufficiency.....	259

Available From JPRS 36298

# CLINICAL MEDICINE

(Vol XLIV, No 4, 1966)

Following is a complete translation of the Russian-language periodical Klinicheskaya Meditsina (English version above), Vol XLIV, No 4, April 1966, Moscow. Names of authors of the articles and original page numbers are cited with each article.

## TABLE OF CONTENTS

## Page

Seventieth Birthday of Boris Borisovich Kogan ..... 1

### Lead Articles

Radioisotope Renography in Diagnosing Diseases of the Kidneys ..... 4

Investigation of the Separate Function of the Kidneys By the Radioisotope Renography Method in Reconstructive Operations on the Renal Arteries for Renovascular Hypertonia ..... 13

### Original Research

Feature Peculiar to Hemodynamics in Persons Working in Conditions of Protracted Electromagnetic High Frequency Radiation ..... 22

Arch of the Aorta on the Right Side and its Clinical Importance ..... 27

Clinical-roentgenological Characteristics of Patients with Atrioventricular Heart Block ..... 41

X-ray Picture of the Lungs During Erythremia ..... 48

(Continued)

Available From JPRS 36301

**KLINICHESKAYA MEDITSINA**  
**Vol XLIV, No 4, 1966**

<u>TABLE OF CONTENTS (Cont'd)</u>	<u>Page</u>
Primary Bronchogenic Cancer Revealed in an Antituberculosis Dispensary .....	54
Recognition and Differential Diagnosis of Some Forms of Benign Esophageal Stenosis .....	60
Successful Operation on Cancer of the Stomach From a Clinical-roentgenological Aspect .....	70
Clinical-morphological Analysis of a Primary Ulcerous Form of Cancer of the Stomach .....	74
Lipoma of the Stomach .....	82
Excessive Mucous Membrane in the Upper Region of the Stomach .....	82
X-ray Diagnosis of Pyloroduodenal Organic Stenosis .....	89
Importance of Pharmacological Test With Morphine in Cholegraphy .....	105
Modification of Intravenous Cholegraphy Method .....	111
Relaxation Duodenography Without The Use of Duodenal Tube .....	118
Influence of Atropine, Belladonna, Platyphylline and Gastropin on the Motricity of the Small Intestine .....	124
Use of Dipiperidine in Duodenal Peptic Ulcer .....	131
Differential Diagnosis Between Infectious Hepatitis (Botkin's Disease) and Mechanical Jaundice .....	136
Osteoarticular Changes in Patients Suffering From Lupus Erythematosus .....	141
Degenerative Dystrophic Lesions of the Cervical Region of the Spine and Their Clinical Manifestations .....	148
The Effect of Adrenalectomy on the State of the Bone System in Itsenko-Cushing Disease .....	156
Remote Results of Roentgenotherapy of Eosinophilic Granuloma of the Bones .....	163
Serotonin Exchange in Some Hypertensive Syndromes .....	167

(Continued)

Available From JPRS 36301

<u>TABLE OF CONTENTS (Cont'd)</u>	<u>Page</u>
<u>Clinical Notes</u>	
Case of Pulmonary Carcinoid With Marked "Serotonin Syndrome" .....	173
Case of Giant Nonfunctioning Adenoma of the Insular Tissue of the Pancreas .....	177
Clinical X-ray Picture of Coccidioidomycosis of the Lungs .....	181
Case of Congenital Pulmonary Polycystosis .....	187
Pulmonary Microcarcinoma Simulating Acute Leukemia .....	191
Stercothorax in Diaphragmatic Hernia .....	195
Malignant Craniopharyngioma With a Clinical Picture of Itsenko-Cushing Disease.....	199
<u>Aid To the Practicing Physician</u>	
Punched Cards in Medical Practice .....	204
<u>History of Medicine</u>	
The Medical Ethics of Sergey Petrovich Botkin.....	210
<u>Congresses and Conferences</u>	
Cancer of the Stomach -- A Vital Health Problem .....	220
<u>Discussions</u>	
Widespread Error in Russian Medical Terminology .....	227
<u>Book Reviews</u> .....	228
<u>Letter To the Editors</u> .....	239

Available From JPRS 36301

# USSR MEDICAL INDUSTRY

Vol. XX, No 4, 1966

[Following is a cover-to-cover translation of the Russian-language periodical Meditsinskaya Promyshlennost' SSSR (English version above), Moscow, No 4, 1966, pp 1-64.]

## TABLE OF CONTENTS

	<u>Source</u>	<u>Report</u>
The Prospects for Development of the Medical Industry in 1966-1970, A. G. Natradze .....	3	1
Prospects for Production of Medicinal Plant Raw Material (1966 -- 1970), A. P. Zhernovoy .....	7	6
Synthesis of 4-(n-Aminobenzolsulfamido)-2,6 - Dimethoxypyrimidine, V. A. Zasosov, N. M. Kolgina, O. N. Volzhina, K. S. Bushuyeva, N. I. Travan' .....	9	10
The Synthesis of Orthonal-2-Methyl-3-(O-Tolyl)-Quinazolone-4, P. A. Petyunin, Yu. V. Kozhevnikov .....	13	15
On the Problem of Dosimetry of the Energy of Decimetric Waves, A. R. Livenson A. A. Frenk .....	15	18
<u>Organization, Planning and Economics of the Industry</u> .....	20	26
Determination of the Expected Requirements for Vitamins, G. S. Varkhovskaya .....	20	26
<u>Exchange of Experience</u> ..	23	29
A New Method for Obtaining $\alpha$ -Chloracetamide -- an Intermediate Product in the Synthesis of Trimecain, L. M. Semikolennykh, M. G. Katsnelson, V. M. Nesterov, .....	23	29

(Continued)

Available From JPRS 36332

МЕДИЦИНСКАЯ ПРОМЫШЛЕННОСТЬ СССР  
Vol. XI, No 4, 1966

<u>TABLE OF CONTENTS (cont.)</u>	<u>Source</u>	<u>Report</u>
A Procedure for Obtaining 8-(3,4-Dimethoxyphenyl)-Ethylamine, V. I. Khmelevskiy, I. A. Kozello, A. Ya. Gasheva .....	26	33
Obtaining Leucoephedrine and Ephedrine from Ephedra Equisetina and the Study of their P-Vitamin Activity, K. V. Taraskina, T. K. Chumbalov, M. T. Ushakova, A. D. Anisimova .....	27	35
The Press Instrument for Tabletting Machines, Ye. Ye. Boruznov, V. M. Dekhtyarenko, S. A. Nosovitskaya .....	29	38
The Use of the High Frequency Pungor Titrator for the Analysis of Chemo-Pharmaceutical Compounds, B. P. Artamonov, Ye. V. Bugreyeva .....	34	45
A Quick Method for Analysis of Moisture in Raw Opium, S. M. Kabanov, S. S. Vasil'yev, A. M. Zakharov .....	39	53
The Use of Hard Polyvinyl Chloride in Disinfecting Equipment, A. P. Pataman, O. A. Fridman .....	40	55
<u>New Medical Preparations and Products</u> .....	44	60
Nihexin, R. A. Al'tshuler .....	44	60
A New Apparatus for Artificial Ventilation of the Lungs: RO-3, R. I. Burlakov, Yu. Sh. Gal'perin, L. N. Petrova .....	46	63
A Portable Erythematous Irradiator, Yu. V. Lenskiy, G. V. Uskova .....	51	71
<u>Abroad</u> .....	55	79
Production and Foreign Trade of Medicinals in the Federal Republic of Germany, Ye. N. Voyevodin .....	55	79
<u>Materials for the Tenth Edition of the State Pharmacopoeia of the USSR</u> .....	60	87
Testing Tablets for Mechanical Strength, S. A. Minina, N. K. Zubkova, L. S. Yefimova, P. E. Rosentsveyg .....	60	87
<u>Current Events</u> .....	63	93
Lilli Karlovna Shtamm .....	63	93

Available From JPRS 36332

**RADIO ENGINEERING AND ELECTRONIC PHYSICS**  
**РАДИОТЕХНИКА И ЭЛЕКТРОНИКА**

NUMBER 12

1965

CONTENTS

	Page
V. A. Bureyev and A. V. Men'shikov: Analysis of the Detection Characteristics of Systems with Variable Resolution . . . . .	1787
G. A. Sokolov: Anomalous Errors in Measurement of Range and Speed in Coherent-Pulse Systems with Periodic Modulation. . . . .	1793
K. P. Kirilyanov: Statistical Characteristics of Radio Emission of Cloudy Atmosphere in the 0.8-cm Band. . . . .	1798
Yu. S. Bondartsev and A. I. Shalman: Operational Analysis of the Polarizer of a Rotationally Polarized Antenna in the Presence of Reflection from the Radiator . .	1804
L. N. Deryugin and M. G. Kuznetsov: Frequency Sensitivity of Antenna Arrays at Various Angles and Its Relation to the Properties of the Feed Waveguide. . . . .	1809
Yu. A. Zaytsev: Plane Axisymmetric Lens with Anisotropic Refractive Index . . . . .	1814
F. Kaminsky: Synthesis of Stepped Waveguide Transitions with a Large Number of Sections . . . . .	1822
R. B. Vaganov: Losses at a Nonuniform Section of a Beam Guide and Their Possible Compensation . . . . .	1832
S. A. Akhmanov, V. G. Dmitriyev, V. P. Modenov and V. V. Fadeyev: Parametric Generation in a Resonator Filled with a Nonlinear Medium . . . . .	1841
V. A. Rylov and V. G. Elenskiy: Self-Biasing Mode and the Phenomenon of Self-Modulation in a Parametric Oscillator . . . . .	1850
O. N. Ietemin and V. G. Rygalin: Noise Figure of an Amplifier Based on the Microwave Modulation-Demodulation Principle . . . . .	1858
V. A. Vanke, L. P. Grigorenko and V. B. Magalinskiy: Investigation of the Amplitude-Phase Characteristics of the Quadrupole Region of Pumping in an Electron-Beam Parametric Mixer . . . . .	1866
L. A. Serebrov and V. L. Shmulevich: Potential Relief when Recording Signals on the Charged Target of a Memory Tube . . . . .	1871
B. Ch. Dyubua and L. A. Stepanov: The Thermionic Emission of Metal-Like Compounds in Barium Vapors . . . . .	1878
Yu. S. Ryabinkin: A Physical Theory of Silicon p-n-p-n Structures in the Cutoff Mode of Operation . . . . .	1881
T. M. Agakhanyan: The Characteristics of a Forward Biased Gradual p-n Junction. . .	1887
I. I. Muratov: Switching Transients in Semiconductor Diodes . . . . .	1895
F. L. Sayakhov and A. I. Shtyrov: On the Physical Meaning of Noise Figure Minimization in a Traveling Wave Tube . . . . .	1899
<b>BRIEF COMMUNICATIONS</b>	
V. N. Gorniz: Distribution Density of a Random Amplitude Signal at the Output of a Limiter . . . . .	1903
K. Sh. Zigangirov: Maximum Accuracy of Parameter Estimates of Complex Signals . .	1904
B. A. Gnygerov: Selection of Parameters of a Proportional-Plus-Integral-Control Network in Phase-Synchronized AFC. . . . .	1907
V. Yu. Petrun'kin and N. A. Yesepkina: Tuning a Radio Telescope which Uses a Planar Reflector . . . . .	1909
V. V. Semyonov: High-Speed Waves in a Helical Waveguide with a Dielectric Coating and a Metallic Jacket . . . . .	1913
D. N. Klyashko: Heterodyning with the Help of a Two-Level Quantum System . . . . .	1916

(Continued.)

Available From The Institute of Electrical and Electronic Engineers

**RADIOTEKHNIKA I ELEKTRONIKA****No 12, 1965****Contents (Continued)**

K. K. Likharev and V. A. Rylow: Oscillation Excitation Processes in a Double-Loop Parametric Oscillator .....	1918
I. V. Pirahin: Use of Electro-Optic Effect in a Michelson Interferometer for Light Modulation .....	1921
V. V. Gurzo, V. S. Slan'makhov and D. I. Trubetskov: The Theory of Parametric Amplification of Cyclotron Waves in Crossed-Field Electron-Beam Devices ....	1926
Yu. S. Arkhangel'skiy and A. I. Shiyrov: Calculation of the Noise Figure of an Unmatched Microwave Amplifier .....	1929
A. S. Taratuta: Method of Prediction of the Lifetime of Semiconductor Devices .....	1933
Yu. S. Ryabinkin: The Current Gain of Micropower Planar Silicon Transistors .....	1935
A. A. Pirtakhvanidze and V. I. Slafeyev: V-I Characteristics of Four-Layer Structures with Two Negative-Resistance Regions. ....	1938
A. N. Zyuganov and S. V. Svechnikov: Cadmium-Sulfide Photocapacitor .....	1940
E. A. Akchurin and V. V. Rud': Self-Excited Tunnel Diode Oscillator .....	1943
Yu. D. Krisilov: On Certain Dynamic Properties of Transistor AGC Systems. ....	1944
M. Ye. Gertsenshteyn and I. A. Beloshin: Capacitive Displacement Sensor as a Parametric System .....	1948
K. I. Kononenko, S. P. Movchan and A. I. Yatsenko: A Method for Decreasing the Noise of the Gaseous Discharge Plasma .....	1950
CORRESPONDENCE .....	1953
CONTENTS FOR 1965 .....	1955

. Available From The Institute of Electrical and Electronic Engineers

SOVIET PUBLIC HEALTH

Vol XXV, No. 3, 1966

[Following is a complete translation of the Russian-language journal Sovetskoye Zdravookhraneniye (Soviet Public Health), Moscow, Vol XXV, No 3, 1966, pp 1 - 96.]

CONTENTS

	<u>Page</u>
B. D. Petrov. An Important Aspect of Historico-medical Investigations	1
B. M. Nostiyev. S. M. Kirov on Medical Care in Pre-Revolution Russia	10
I. M. Matovski et al. The Movement for Communist Labor and the Health of Workers	16
N. I. Gavrilov et al. Organization of Work and Morbidity of Workers in Industrial Enterprises	21
Ye. N. Skladchikova. Cooperation Between Public Organizations, Public Health Organs, and Industrial Enterprises of Kemerovskaya Oblast for the Protection of Workers' Health	29
F. Kh. Zinger et al. Cooperation Between Sanitary and Epidemiological Stations and Medicosanitary Units for the Reduction of Morbidity Rate Among Industrial Workers	37
V. V. Assman et al. Shop Physician as Organizer of the Fight Against Morbidity Among Workers	45
P. A. Korol' et al. Experience in Organizational and Methodical Work of Oblast Hospitals in Industrial Cities of Donetskaya Oblast	54
Ya. I. Dreyerman. From the Experience of Work of the Commission for the Reduction of Morbidity in Industrial Enterprises	61
L. P. Lugovaya. Medical Service for Women Workers Employed in Paper Industry.	64
Ye. Ye. Kanyuk. Labor Conditions and Hypertension in Miners	67

(Continued)

Available From JPRS 36276

**SOVIETSKOYE ZDRAVOOKHRANENIYE**  
Vol. XIV, No. 3, 1966

G. Ye. Dudko. Experience in the Fight Against Micro-traumatism and Pyogenous Affections Among Miners	73
A. Ye. Pasternak and M. P. Kotel'nikova. Experience in the Study of Disablement in Workers of Textile Enterprises	78
G. A. Plyusina. Organization of the Work of Generalization and Propagation of Advanced Methods	84
V. K. Ovcharov. The Birth Rate and Population Growth Prospects	88
P. I. Artemov and S. I. Stegunin. People's Faculty of Health at the Kuybyshev Medical Institute	95
K. G. Gorshukova and L. N. Kalagireva. Aid of Medical Institutes to Practical Public Health	100
New Books	104
V. Ye. Sycheva. From the History of the Fight of Kuzbas Workers for the Protection of People's Health	106
G. A. Beylikhis. Problems of Health Protection of Workers in the Activities of Trade Unions (1905-07)	112
L. N. Lavrova. A Contribution to the History of the Ryazan Medical Institute imeni I. P. Pavlov	121
Memorable and Jubilee Dates of the History of Medicine in 1966	130
O. A. Aleksandrov. Some Trends in the Development of Industrial Public Health Abroad	141
Budshav, Chagva. Forty Years of Public Health in the Mongolian Peoples' Republic	151
M. V. Makarova. Some Aspects of the Organization of Sanitary Work in France	157
Book Reviews and Bibliography	164

Available From JPRS 36276

SOVIET PUBLIC HEALTH

(Vol. XXV, No. 4, 1966)

Following is a complete translation of the Russian-language periodical Sovetskoye Zdravookhranyeniye (English version above), Vol. XXV, No. 4, Moscow, 1966. Authors' names and page numbers are cited with each article.

CONTENTS

	<u>Page</u>
V. I. Lenin and the Development of Medical Science.....	1
Important Tasks of Medical Historians.....	13
The Development of Public Health in the Abkhaz ASSR in Forty-Five Years of Soviet Power.....	23
New Data on the Work of N. A. Semashko.....	28
Reducing the Amount of Physicians' Records..	36
Experience in the Use of a Tape Recording Center at the Moskovskaya Oblast Territorial Hospital in Podol'sk.....	44
Experience in the Work of an Automatic Sound Recording Center.....	55
The Struggle Against Alcoholism on the Pages of <u>Pravda</u> (1912-1914).....	61

(Continued)

Available From JPRS 36290

SOVETSKOYE ZDRAVOOKRANENIYE  
Vol XIV, No 4, 1966

On the Causality in Medicine.....	69
New Books.....	72
The Physician-Revolutionist S. M. Bogoraz...	74
N. I. Pirogov and the Navy Medical Workers During the Defense of Sebastopol (1854-1855).....	80
New Aspects of N. I. Tezyakov's Activities..	85
The Problem of Scientific Schools.....	88
On the History of Military Hospitals in Arkhangel'sk.....	93
Significant Dates in the History of Medicine	99
New Books.....	106
The Role of Soviet Physicians in the Develop- ment of Public Health in Yemen.....	107
Public Health in the Somali Republic.....	110
Research on the History of Medicine in the Hungarian People's Republic.....	118
V. I. Dal's Explanatory Dictionary and Its Role in the Study of the History of Native Medicine.....	123
History of Ukrainian Medical Education and Scientific Medical Schools.....	126
N. A. Bogoyavlenskiy (On the Occasion of His 70th Birthday).....	132
Problems of Rural Public Health.....	136
The Eleventh International Congress on the History of Science.....	138
Combat Exploits of Medical Workers.....	141
Third Plenum of the Board of the All-Union Society of Medical Historians.....	142

(Continued)

Available From JPRS 36290

**SOVETSKOYE ZDRAVOOKRANENIYE**  
**Vol XXIV, No 4, 1966**

Republic History of Medicine Museum in the Ukrainian SSR.....	148
From the Experience of the History of Medicine Museum imeni P. Stradyn'.....	150
Problems of the History of Medicine at the First Transcaucasian Conference on the History of Science.....	156
The Second Scientific Session of Scientific- Research Institutes in Gor'kiy.....	159
A Seminar for the Exchange of Experience in the Work of Rapid Aid Medical Stations of the Baltic Republics.....	164
Conference on Geographic Surroundings and Public Health.....	170
All-Union Plenum in a Village.....	173

Available From JPRS 36290

# STEKLO I KERAMIKA

## EDITORIAL BOARD

D. I. Alekhin  
M. S. Ananov  
K. T. Bendorov  
O. K. Borvinkin  
(Editor-in-Chief)  
I. A. Buzits  
D. I. Dubrovinski  
V. V. Eriashin  
V. S. Fedorov  
V. K. Kozlov  
A. A. Kopylov  
E. L. Kozlov  
N. K. Likh  
K. A. Myasnikov  
V. I. Orlovskii  
A. P. Potanin  
D. N. Potanin  
F. G. Solov  
I. Ya. Yurshin

# GLASS and CERAMICS

A translation of STEKLO I KERAMIKA,  
a publication of the Academy of Sciences of the USSR

© 1966 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING  
CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Vol. XXXI, Nos. 7-8

July-August, 1965

## CONTENTS

	RUSS. PAGE	PAGE
<b>VOL. 22, NO. 7</b>		
Calculating the Parameters of Glass Currents in the Tank, Feeder or Working Channel of a Tank Furnace—K. A. Pchalyakov and A. A. Sokolov .....	427	1
Magnetic Amplifier in the Supply Circuit for Electric Glass Furnaces—B. I. Artem'ev .....	432	5
Structural Birefringence in Glass in the System $Li_2O-Al_2O_3-SiO_2$ —N. I. Ananich, O. K. Borvinkin, and L. V. Dyatlova. ....	435	7
Development of Compositions and an Investigation of the Properties and Structures of Crystallized Melts Obtained from Local Raw Materials—L. G. Mal'nichenko and V. P. Safronova .....	437	9
Obtaining Images on Sitrals—E. A. Vievutskii and E. T. Sharnopol'skaya .....	441	12
Investigating the Breaking Frequency in Continuous Glass Fiber in Relation to the Glass Level—B. I. Baskov, S. S. Kutukov, and M. G. Chernyak .....	443	14
Opportunities of Expanding the Raw Materials Base for The Production of Earthenware Facing Tiles—E. L. Gumenyuk, L. E. Kryshel', and Ch. A. Supanova .....	446	16
Acid-Resistant Ceramics Based on Quartz Porphyries—M. A. Ismailova .....	448	18
Rapakivi Granites as a New High-Potash Feldspathic Material for Electric Porcelain and Abrasive Industries—A. S. Khakham .....	451	21
Automatic Recording of Rheological Curves for Porcelain Bodies—G. N. Maslennikova and A. A. Lisov .....	455	24
Centrifugal Mill for Grinding Clay Materials—V. Ya. Kozlov, G. P. Sobolev, G. A. Soldatov, N. F. Sorokin, and I. M. Alekhyuk .....	459	27
Syenite Crystalline Glass for Ceramics—I. G. Khizanishvili and G. G. Gaprindashvili .....	463	30
<b>INDUSTRIAL EXPERIENCE</b>		
Increasing the Checker Height in Channel Tank Furnaces—A. I. Kukarkin .....	464	31
Mechanized Working of Milk Thermometer-Glass on Vertical Drawing Machines —K. P. Khalonen, A. S. Pryanishnikov, and G. F. Iovleva .....	466	33
Automatic Machine for Calibrating Glass Tubing from its External Diameter—N. G. Fedirko .....	470	36

(Continued)

Annual Subscription: \$125

Single Issue: \$30

Single Article: \$15

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever  
without permission of the publisher. Permission may be obtained from Consultants Bureau, A  
Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

# CONTENTS (continued)

	PAGE	RUSS. PAGE
The Introduction of Ground Enamel Based on Danburite Concentrate—K. K. Ket'ko. ....	473	38
Technology for Making Press Powders with Slip Dewatering in a Drying Drum —A. Ya. Anpilov, N. N. Ignatov, and M. V. Krasnosel'skiĭ. ....	475	39
IN FACTORIES AND INSTITUTES		
In Glass and Porcelain Factories of the Ukraine. ....	479	42
FROM FOREIGN JOURNALS		
Transferring Floating Ribbons of Glass from the Molten Metal to a Gas Pillow. ....	481	43
Obtaining Thin Sheet Glass by the Float Method. ....	482	43
Side Guides for the Floating Ribbon of Glass. ....	483	43
Polishing a Ribbon of Glass by Immersion in Molten Material. ....	484	43
The Effect of Titania on the Properties of Glass. ....	485	44
Transparent Semicrystalline Material with a High Dielectric Constant for Electroluminescent Instruments. ....	486	44
Controlled Crystallization of Molten Minerals. ....	487	44
Kilns for Rapid Firing of Ceramics. ....	488	45
Multistory Roller Kilns for Firing Ceramic Tiles. ....	489	45
Patents of Foreign Countries. ....	490	46
REVIEWS		
Stroizdat to Publish this Book in 1965. ....	496	48
VOL. 22, No. 8		
New Products from Moscow Rural Factories for Builders—N. I. Dikerman. ....	498	1
Achievements of Modern Chemistry in the Glass and Ceramics Industries—N. K. Lisin. ....	502	4
Approximate Calculation of the Specific Heat Consumption in Glass Tank Furnaces —D. S. Velov. ....	505	6
Bubbling Glass of Composition NS-1—A. A. Zaliznyak, A. A. Tsukanov, and E. A. Vinokurov. ....	509	8
Investigating the Volatilization of Fluorine During the Melting of Milk Glass —A. F. Melik-Akhnasaryan, K. M. Tatevosyan, and G. G. Manvelyan. ....	511	10
Investigation of the Composition and Nature of Chemical Heterogeneities in Industrial Glasses—K. T. Bondarev, V. A. Minakov, and A. A. Zaikina. ....	514	13
The Action of Neutron Radiation of Glass-Crystalline Materials—S. M. Brekhovskikh and Yu. L. Grinshtein. ....	517	15
New Lead Containing Product For the Production of Domestic and Decorative Glass —N. E. Elizarov, N. A. Yudin, and G. V. Voronkova. ....	521	18
Nonelastic Deformation of Glass and Ceramic Articles under their Own Weight During Heat Treatment—N. V. Solomin and A. N. Solomin. ....	523	19
High-Temperature Gas Spray Drying for Ceramic Slips—S. A. Blokh, Yu. I. Volovik, G. A. Soldatov, and V. K. Levitskiĭ. ....	526	21
The Use of Hydrostatic Pressing for Manufacturing Sanitary Ceramic Ware —E. I. Sheinin and N. S. Belostoukaya. ....	529	23
Alkaline Kaolins of the Prosyanyov Region as a Source of High-Potassium Feldspathic Raw Materials—V. I. Sivokon'. ....	531	25
The Reaction of Steel with Silicate Melts—G. I. Belyaev, M. D. Shcheglova, D. V. Gersmava, and O. P. Drobich. ....	533	27
INDUSTRIAL EXPERIENCE		
Modernizing the 4-ShPS Machine—I. Ya. Ivanov. ....	537	30
New Design for Shears for Cutting Molten Glass—V. S. Tamarchenko. ....	540	32
Device for Resin Spraying—V. I. Denisov and V. K. Bredun. ....	541	33

(Continued)

Available From Consultants Bureau

# CONTENTS (continued)

	PAGE	RUSS. PAGE
Reconstructing an Old Concern on the Basis of New Techniques—L. Ya. Mishulovich.....	543	35
IN FACTORIES AND INSTITUTES		
Glorious Jubilee (The Dyst'nov Crystal Factory is 175 Years Old).....	547	38
FOREIGN EXPERIENCE		
The Production of Silicon-Carbide Saggers and Bars at the Nova-Rola Porcelain Factory (Czechoslovakia).....	552	41
FROM FOREIGN JOURNALS		
Sheet Glass with Heat-Absorbing Films.....	554	42
Glass with a Three-Layer Electric-Conducting Film.....	555	43
Opacified Sheet Glass "Detopak".....	556	43
Nine Licences for the Production of Sheet Glass by the Float Method.....	557	43
Preventing the Sticking of Sheet Glass to Molds Used for Bending.....	558	43
Sanitary Porcelain Fired at Low Temperatures.....	559	43
Tunnel Kilns for Rapid Firing of Sanitary Ceramics.....	561	44
Patents of Foreign Countries.....	562	45
INFORMATION		
International Exhibition "Chemistry in Industry, Building and Agriculture".....	569	46
In the State Committee for the Building Materials Industry.....	570	47
Isaak Il'ich Kitaigorodskii.....	571	47

The Russian press dates (podpisano k pečati) of the first and second issues covered in this issue of the translation were, respectively, 5/27/1965 and 6/29/1965. Publication of the material translated in this issue is therefore known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place in two parts, the second being published shortly after the later of the dates.

Available From Consultants Bureau

**Vestnik OF THE USSR ACADEMY OF MEDICAL SCIENCES**

Vol XXI, No 4, 1966

[Following is a complete translation of the Russian-language journal Vestnik Akademii Meditsinskikh Nauk SSSR (Herald of the USSR Academy of Medical Sciences), Moscow, Vol XXI, No 4, 1966, pp 3-95.]

**Table of Contents**

	<b><u>Page</u></b>
S. Ye. Severin. Regulation of Metabolism in the Myocardium . . . . .	1
N. V. Kaverina. Pharmacological Effects Upon the Neural Regulation of Coronary Circulation . . . . .	12
A. I. Strukov. Normal and Pathological Functional Morphology of the Myocardium . . . . .	19
M. D. Mashkovskiy. Blockade of Peripheral Adrenergic Systems in Relation to the Regulation of the Circulation . . . . .	37
M. Ye. Marshak. Regulatory Mechanisms of Regional and Zonal Circulation. . . . .	50
M. N. Kondrashova. Soft Uncoupling of Oxidative and Energetic Processes -- the Basic Action of the Cardiac Glycosides . . . . .	59
P. P. Ozolyn'sh and G. A. Yankovskiy. The Role of Osteoception in Regulating the Regional Circulation Experimentally and Clinically . . . . .	66

(Continued)

Available From JPRS 36357

<b>CONTENTS (continued)</b>	<u><b>Page</b></u>
M. L. Belen'kiy. Certain New Probable Pathways of Pharmacological Action Upon the Regulation of Cardiovascular System Activity . . . . .	72
B. N. Klosovskiy and V. S. Yermakova. Histogenesis of the Heart and its Disorders Arising from Noxious Factors. . . . .	80
N. N. Gorev and L. P. Cherkasskiy. Peculiarities of the Cardiovascular System Reponse Following Removal of a Lung . . . . .	90
B. A. Lapin, G. M. Cherkovich and L. A. Yakovleva. Experimental Reproduction of Cardiovascular System Diseases in Monkeys . . . . .	100
L. I. Mel'nikova. Discussion Concerning Reports of the Field Session of the USSR Academy of Medical Sciences Devoted to the Problem "Regulating Mechanisms of Cardiovascular System Activity" . . . . .	113
V. I. Astrakhan. Basic Problems in the Clinical Investigation of New Anti-Tumor Preparations. . . . .	118

**CONFERENCES AND MEETINGS**

The Results of a Conference Devoted to the Motor Analyser and Its Relationships from Morphological, Physiological and Clinical Aspects . . . . .	128
---	-----

**Available From JPRS 36357**

Vestnik OF THE USSR ACADEMY OF SCIENCES

Vol 36, No 2, 1966

Following is a complete translation of the Russian-language journal Vestnik Akademii Nauk SSSR (English version above), Moscow, Vol 36, No 2, Feb 1966, pp 3-190.

Table of Contents

	<u>Page</u>
Outstanding Victory of Soviet Science and Technique. The First Scientific Station on the Moon.....	1
GENERAL MEETING OF THE ACADEMY OF SCIENCES USSR (13-14 December 1965)	
Opening Address of Academician M. V. Keldysh.....	5
Economic Science and Problems of Control of the National Economy. Report of A. N. Rumyantsev, Corresponding Member of the Academy of Sciences USSR.....	11
The Main Directions of Technical Progress in Connection with the Achievements of Science. Report of Academician N. D. Millionshchikov.....	30
Economic Problems of Technical Progress Report of L. M. Gatovskiy, Corresponding Member of the Academy of Sciences USSR.....	44
Discussion of the Reports on Problems of Economics and Technical Progress.....	60
Problems of Price Formation in a Socialist Economy. Report of V. P. D'yachenko, Corresponding Member of the Academy of Sciences USSR.....	92
Optimal Planning and Price Formation. Report of Academician N. P. Fedorenko.....	104
Discussion of Reports on Questions of Price Formation ..	116
	(Continued)

Available From JPRS 36891

	<u>Page</u>
Concluding Remarks of Academician M. V. Keldysh.....	135
Resolution of the General Meeting.....	137
<b>IN THE PRESIDIUM OF THE ACADEMY OF SCIENCES USSR</b>	
Results and Prospects of Scientific Research on the History of Philosophy.....	142
<b>INTERNATIONAL SCIENTIFIC LIFE</b>	
V. A. Vinogradov. Multilateral Collaboration of the Academies of Sciences of Socialist Countries.....	153
M. S. Zverev. Soviet Astronomers in Chile.....	159
M. S. Rabinovich. The Study of Ionization Effects in Gases (Conference in Belgrade).....	165
A. N. Terenin and G. S. Denisov. The European Confer- ence on Molecular Spectroscopy.....	169
P. G. Kostyuk. The Physiological Congress at Tokyo...	176
V. A. Kozhevnikov. Contemporary Biomedical Electron- ics (International Conference in Japan).....	181
P. N. Tret'yakov. The Congress on Slavic Archeology at Warsaw.....	186
Brief Reports.....	190
<b>SESSIONS, CONFERENCES AND MEETINGS</b>	
V. A. Garmash. Investigations of Coding Theory (All- Union Conference at Baku).....	226
V. G. Teyfel'. Investigation of Giant Planets (All-Union Conference at Alma-Ata).....	227
N. B. Divari and V. N. Obridko. In the Astronomical Council (Plenums of the Commissions).....	230
B. A. Bronshten. Fourth Congress of the All-Union Astronomical-Geodetic Society.....	233
G. B. Abdullayev. Investigation of the Physical Properties of Semiconducting Compounds.....	236
M. S. Sominskiy. Paths in the Utilization of Solar Energy (All-Union Conference at Ashkhabad).....	238
V. V. Rzhnevskiy. The Physics of Rocks and Processes (All-Union Conference at Moscow).....	240
Zh. S. Yorzhanov. Work on Rock Mechanics (All-Union Conference at Alma-Ata).....	241
B. M. Kadenatsi. The Development of Investigations on Chemical Reactions in the Solid Phase (All-Union Conference at Moscow).....	242

(Continued)

Available From JPRS 36291

VESNIK AKADEMII NAUK SSSR  
Vol XLVI, No 2, 1966

	<u>Page</u>
B. A. Onusaytis. News in the Theory and Practice of Adsorbents (Session at Moscow).....	250
N. N. Vorozhtsov, et al. Discussion of the Problems of Contemporary Chemistry (Conference at Novosibirsk).....	255
P. P. Moiseyev. Problems of the Peasant Movement in the Countries of Asia and Africa (Conference at Moscow).....	261
A. A. Pini. Session of the Pushkin Commission.....	264
MEMORIAL DATES	
The Einstein Jubilee	
N. S. Kozodayev. Experimental Aspects of the Special Theory of Relativity.....	267
A. S. Kompaneyets. The Fiftieth Anniversary of the General Theory of Relativity.....	276
A. O. Gel'fond. 150th Anniversary of the Birth of K. Weierstrass.....	278
In Memory of A. P. Kotel'nikov.....	280
In Memory of P. P. Shirshov.....	281
In Memory of A. V. Topchiyev.....	283
CHRONICLE AND INFORMATION	
Award of the Gold Medal named for M. V. Lomonosov.....	285
Award of the Prize named for F. A. Bredikhin.....	285
The Jubilee of A. A. Shternfel'd.....	286

[ NOTE: NonRussian names that are not readily identifiable  
are given in the transliterated form. ]

Available From JPRS 36291

ZHURNAL ANALITI-  
CHESKOI KHIMII  
EDITORIAL BOARD

I. P. Alimarin  
(Editor-in-Chief)  
A. K. Babko  
A. I. Buzov  
(Secretary)  
P. N. Fel'd  
Z. F. Shakhova  
I. V. Tananayev  
A. P. Terent'ev  
A. P. Vinogradov  
Yu. A. Zolotov

# JOURNAL OF ANALYTICAL CHEMISTRY OF THE USSR

A translation of *ZHURNAL ANALITICHESKOI KHIMII*,  
a publication of the Academy of Sciences of the USSR

© 1965 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING  
CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Volume 20, Number 9

September, 1965

## CONTENTS

Through an error in the pagination of *Zhurnal Analiticheskoi Khimii*, the July issue, No. 7, was numbered from 769 to 904, the August issue, No. 8, from 769 to 883, and the September issue, No. 9, from 889 to 1032. Thus, the page numbers from 769 to 904 are duplicated. In the translation all references to pages in *Zhurnal Analiticheskoi Khimii* will be to the numbers actually printed on the pages, preceded by the issue number.

	RUSS. PAGE	PAGE
The Analytical Possibilities of Salicylal-2-Aminophenol. Communication 1. The Behavior of Salicylal-2-Aminophenol in Aqueous Solution—A. A. Tumanov and V. S. Efimychev . . . . .	365	889
A Study of the System: Metal—Anion—Basic Dye—Organic Solvent. The Form in Which Dye Reagents Exist and Their Optical Characteristics—I. A. Blyum and N. N. Pavlova . . . . .	973	898
Differential Photometry Using Photoelectric Colorimeters with Optical Compensation—V. F. Barkovskii and L. N. Khurtova . . . . .	984	911
The Effect of Instrumental Error on the Precision and Sensitivity of X-Ray Spectrographic Analysis. Communication 1—Yu. G. Lavrent'ev and E. E. Vainshtein . . . . .	990	918
A Pulsepolarographic Method for Analyzing Solutions at Elevated Temperatures—B. Ya. Kaplan, I. A. Sorokovakaya, and O. A. Shiryayeva . . . . .	998	927
Increasing the Accuracy of Quantitative Analysis on a Gas Chromatograph with an Argon Ionization Detector—B. G. Belen'kii, V. A. Orestova, and Yu. E. Elzner . . . . .	1003	934
Photometric Determination of Aluminum by Means of Xylenol Orange—V. I. Tikhonov . . . . .	1009	941
Photometric Determination of Niobium in Zirconium Based Alloys by Means of Sulfochlorophenol S—S. B. Savvin, V. A. Bortsova, and E. N. Malkina . . . . .	1014	947
Determination of Molybdenum and Tungsten in High Alloy Steels and Alloys on One Aliquot by Amperometric Titration—V. I. Bogovina, V. P. Novak, and V. F. Mal'tsev . . . . .	1019	951
Indicators for the Complexometric Determination of Manganese—V. A. Rad'ko, E. M. Yakimets, and E. F. Vladimirtsev . . . . .	1022	955
Determination of Rhenium by a Kinetic Method—D. I. Ryabchikov, V. I. Lazareva, and A. I. Lazarev . . . . .	1026	980

Annual Subscription: \$135

Single Issue: \$30

Single Article: \$15

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, A Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

## CONTENTS (continued)

	RUSS. PAGE	PAGE
2, 7-Dichlorotropic Acid as a Reagent for the Photometric Determination of Iron (III). A Spectrophotometric Study of the Complex Forming Process—N. N. Basargin and Zh. I. Nemtseva .....	1032	966
B-Mercaptohydrocinnamic Acid and its Esters as Reagents for the Extraction Photometric Determination of Palladium—A. I. Busev and D. Kh. Vin' .....	1040	976
An Attachment for Adapting Type FÉK Photocolorimeters for Gas Analysis (Photometric Determination of Water Vapor, Sulfur Dioxide, and Acetylene in Gas Mixtures) —R. I. Alekseev and E. A. Tokarskaya .....	1046	983
Elemental Organic Analysis by the "Wet Oxidation" Method. Communication 9. Analysis of Silicotitanophosphoroorganic Compounds—B. M. Luskina, A. P. Terent'ev and N. A. Gradska .....	1052	990
Polarographic Behavior of 5-Bromo-3, 6-Dinitropseudocumene—G. P. Tikhomirova and S. L. Belen'kaya .....	1055	994
Polarographic Determination of Aromatic Amines Using a Rotating Platinum Anode —V. D. Bezuglyi and Yu. I. Beilis .....	1060	1000
Gas Liquid Chromatographic Analysis of Hydroxylaldehydes—L. M. Andronov and Yu. D. Norikov ..	1066	1007
Analysis of Isophthalyl Chloride—E. A. Emelin and G. P. Svistunova .....	1069	1010
<b>BRIEF COMMUNICATIONS</b>		
Spectrographic Determination of Indium and Germanium in Concentrates from the Lead- Zinc Industry—E. I. Brainin and L. I. Pyasetskaya .....	1072	1014
Extraction Conditions for Butylrhodamine B Fluoniobate—N. I. Pavlova and V. G. Sayapin .....	1075	1016
Determination of Phosphate Ions and Their Removal During Alkali Metal Determination —I. V. Tananaev and N. A. Dzhabishvili .....	1078	1019
Photometric Microdetermination of Potassium, Rubidium, Cesium, and Thallous Ions as Their Dipicrylamines (Hexanitrodiphenylamines)—D. S. Gorbenko-Germanov and R. A. Zenkova .....	1080	1020
The Impurity Content of Normal Paraffin Hydrocarbons Used in Analysis—V. F. Fedonin, N. F. Tolikina, O. N. Belyatskaya and V. E. Gul' .....	1083	1022
<b>CRITICISM AND BIBLIOGRAPHY</b>		
S. V. Elinson, K. I. Petrov., A. I. Busev, ed.—The Analytical Chemistry of Zirconium and Hafnium—Reviewed by V. M. Peshkova .....	1085	1025
J. Stary. The Solvent Extraction of Metal Chelates—Reviewed by Yu. A. Zolotov .....	1086	1026
<b>INFORMATION</b>		
Aleksandr Pavlovich Vinogradov (On his Seventieth Birthday) .....	1087	1027
Moscow Seminar on Analytical Chemistry—Yu. M. Dedkov and O. M. Petrukhin .....	1089	1029

The Russian press date (podpisano k pechatu) of this issue was 8/30/1965.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

**Available From Consultants Bureau**

**CONTENTS**

	Page	Russian Reference
Discrete States of a Plasma Beam and the Transitions Between Them. (E) . . . . .	949	49, 1377
..... M. V. Nezlin and A. M. Rointsev		
The Mieschauer Effect in Compounds of the Fluorite Type. (E) . . . . .	956	49, 1389
..... N. S. Ibrailov, R. N. Kus'min, and G. S. Zhdanov		
A New Method of High Voltage Supply to Streamer Chambers. (E) . . . . .	959	49, 1394
..... N. S. Rudenko		
Magnetic Properties of Single-crystal and Polycrystalline Praseodymium Diselenide, PrSe <sub>2</sub> . (E) . . . . .	963	49, 1399
..... V. I. Chechurnikov, A. V. Pechonnikov, V. I. Kalitin, and E. I. Yarembash		
Electron Loss and Formation of Slow Negative Ions in Collisions of H Atoms and H <sup>+</sup> Ions with Gas Molecules. (E) . . . . .	965	49, 1402
..... D. V. Piliipenko, V. A. Gusev, and Ya. M. Fogel'		
Gas Laser Excited in the Process of Photodissociation. (E) . . . . .		
..... T. L. Andreeva, V. A. Dufkin, V. I. Malyshev, G. V. Mikhailov, V. N. Sorokin, and ..... L. A. Novikova	969	49, 1408
Open Electron Trajectories and Resistivity Oscillations in Zinc. (E) . . . . .	971	49, 1411
..... Yu. P. Gaidukov and I. P. Krechetova		
An Investigation of the Dynamics of the Motion of Tin Atoms on a Silica Gel Surface by Means of the Mieschauer Effect. (E) . . . . .	979	49, 1424
..... I. P. Suzdalev, V. I. Gol'danskii, E. F. Makarov, A. S. Plachinda, and I. A. Korytko		
The Effect of Periodic Structure on the Optical Properties of Aluminum. (E) . . . . .	984	49, 1431
..... G. P. Motulevich, A. A. Shubin, and O. F. Shustova		
Stimulated Raman and Brillouin Scattering in Selective Resonators. (E) . . . . .	986	49, 1435
..... E. B. Aleksandrov, A. M. Bonch-Bruyevich, N. N. Kostin, and V. A. Khokhlov		
Temperature Dependence of the Optical Absorption in the Antiferromagnet NaNiF <sub>3</sub> . (E) . . . . .	993	49, 1445
..... R. V. Pisarev		
Thermal Conductivity of Tm, Yb, and La at Low Temperatures. (E) . . . . .	997	49, 1450
..... N. G. Aliev and N. V. Volkenshtein		
Surface Tension of Hydrogen Near the Critical Point. (E) . . . . .	999	49, 1453
..... Yu. P. Bagol and V. V. Pashkov		
Magnetoacoustic Investigation of the Fermi Surface of Molybdenum. (E) . . . . .		
..... P. A. Bezuglyi, S. E. Zhovago, and V. I. Denisenko	1002	49, 1457
Vector Meson in a Coulomb Field. (T) . . . . .		
..... D. Ya. Karjanko and A. P. Yaroshenko	1006	49, 1463
The Scattering Matrix for Finite Time Intervals in the Wave Function Space of Inter- acting Particles. (T) . . . . .	1010	49, 1470
..... V. V. Alekseev		
A Self-consistent Calculation of the K <sup>+</sup> Resonance Parameters. (T) . . . . .	1013	49, 1475
..... P. S. Isaev and G. M. Radutski		
Nuclear-spin Diffusion in Electron-nuclear Double Resonance. (T) . . . . .	1018	49, 1483
..... S. P. Dvignopol and T. G. Izumova		
The Behavior of a Semiconductor in a Strong Resonant Radiation Field. (T) . . . . .	1024	49, 1492
..... V. F. Chel'tsov		
Effect of Inhomogeneities on the Operation Regime of Solid-state Lasers. (T) . . . . .	1026	49, 1495
..... A. F. Suchkov		
Suppression of Inelastic Channels in Resonance Scattering of Neutrons in Regular Crys- tals. (T) . . . . .	1032	49, 1504
..... Yu. Kagan and A. M. Afanas'ev		
On the Axiomatic Construction of the Scattering Matrix. 4. Lagrangian Form of the Theory. (T) . . . . .	1041	49, 1518
..... B. V. Medvedev		
Detonation and Gas-dynamic Discontinuities in Phase Transitions of Metastable Sub- stances. (T) . . . . .	1047	49, 1526
..... N. M. Kuznetsov		
Detection of Solar Neutrinos by Means of the Ga <sup>71</sup> ( $\nu$ , e <sup>-</sup> )Ge <sup>71</sup> Reaction. (T/E) . . . . .	1051	49, 1532
..... V. A. Kus'min		

(Continued)

Available From the American Institute of Physics  
 Vol. XIII, No. 5, 1966

**RUSSIAN EXPERIMENTAL'NOI I TEORETICHESKOI FIZIKI**  
**Vol XLIX, No 5, Nov, 1965**

CONTENTS—continued	Page	Russian Reference
Automodulation of the Radiation from a Laser with a Two-mode Resonator. (T) . . . . .	1053	49, 1535
Nonuniqueness of the Solution of the Scattering Problem. (T) . . . . .	1059	49, 1544
Spontaneous Transitions Accompanying the Passage of Light through Anisotropic Media. (T) . . . . .	1067	49, 1556
Restrictions of the Elastic Scattering Cross Section in the Diffraction Peak Region. (T) . . . . .	1069	49, 1558
High-frequency Stabilization of the Screw Instability in an Electron-hole Semiconductor Plasma. 1 (T) . . . . .	1071	49, 1562
The Investigation of Nuclear Quadrupole Interaction in Experiments on the Mössbauer Effect. (T) . . . . .	1080	49, 1576
On Strong Fluctuations of Light Wave Parameters in a Turbulent Medium. (T) . . . . .	1083	49, 1581
Effect of Particle Collisions on Plasma Fluctuations. (T) . . . . .	1089	49, 1591
Possible Existence of a Critical Point in First-order Electron Transitions. (T) . . . . .	1095	49, 1601
On Evaluating the Polarization of an Atom in a Strong Electromagnetic Field. (T) . . . . .	1098	49, 1605
Quantum Field Theory Equations in the Axiomatic Approach. II. (T) . . . . .	1102	49, 1611
Diffusion in a Solution near the Critical Point of Vapor Formation. (T) . . . . .	1110	49, 1624
Inhomogeneous Resonance in Antiferromagnets. (T) . . . . .	1115	49, 1631
Bremsstrahlung from the Electrons of a Medium and Hard Vavilov-Cerenkov Radiation. (T) . . . . .	1120	49, 1637
Recording the Gravitational Emission of Double Stars of the Galaxy. (T) . . . . .	1128	49, 1650
Double NN Scattering with a Polarized Beam and a Polarized Target. (T) . . . . .	1130	49, 1653
Spin-magnetophonon Resonance and the Magnetoresistance Oscillations Produced by It in Semiconductors. (T) . . . . .	1137	49, 1664

Available From the American Institute of Physics  
 Vol XLIX, No 5, 1965

**TABLE OF CONTENTS**

U. S. Board on Geographic Names Transliteration System.....	111
Designations of the Trigonometric Functions.....	iv
Energy-Momentum Tensor of Radiation in a Moving Medium Under Conditions Close to Equilibrium, by V. S. Imshennik and Yu. I. Morozov.....	1
The Speed of Weak Waves in a Radiating Gas, by V. A. Prokof'yev.....	16
On the High Temperature Internal Friction During Longitudinal Vibrations, by S. I. Meshkov and T. D. Shermergor.....	33
Invariant Group Solutions of Equations of a Spatial Stationary Beam of Charged Particles, by V. A. Syrovoy.....	44
Integral-Moment Method of Solving the Boltzmann Kinetic Equation, by M. N. Kogan, (Insert TT-63-1033).....	64
Nonequilibrium Distribution of Energy by Oscillatory Degrees of Freedom of Molecules During Disturbance of Maxwellian Distribution, by A. I. Osipov and Ye. V. Stupochenko.....	74
On the Measurement of Pressure in a Spin Transverse Wave, by V. V. Kitrofanov, V. A. Subbotin and M. Ye. Topchiyan.....	81
Laminar Flame in a Turbulent Flow, by A. M. Klimov.....	88
Propagation of Zone of Chemical Reaction in Pure Acetylene and Mixtures with Other Gases, by B. A. Ivanov and S. M. Kogarko.....	105
Experimental Determination of Coefficient of Thermal Conduc- tion of Heat-Insulating Materials by Method of Self- Simulating Conditions, by U. I. Vasil'yev, Yu. A. Dem'yanov, V. I. Kurnakov, A. V. Malakhov, Kh. A. Rakhmatulin and A. N. Runynskiy.....	120
Theory of the Deposition of a Viscous Liquid onto a Fiber or Wire Being Withdrawn From the Liquid, by B. V. Deryagin.....	127
Turbulent Pulsations in a Liquid Jet, and Its Atomization, by G. P. Skrebkov.....	142
Scalar Effect and Influence of Durability in a Directed Explosion, by V. M. Kuznetsov and Ye. N. Sher.....	152
Similarity of Compression Waves During Explosions in Grounds, by B. G. Rulev.....	166
Waves in the Surface Region of a Ground Half-Space During a Contact Explosion, by V. D. Alekseyenko.....	183

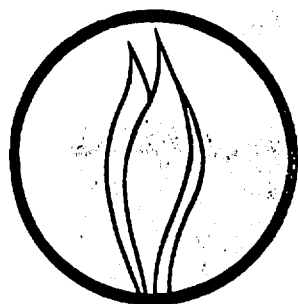
(Continued)

Available From FED-EE-64-85

ЖУРНАЛ ПРИКЛАДНОЙ МЕХАНИКИ И ТЕХНИЧЕСКОЙ ФИЗИКИ  
№ 3, 1963

On the Condition of Total Plasticity for an Axially Symmetric State, by D. D. Ivlev and T. N. Martynova.....	189
Condition of Deformation of a Rigid Plastic Body in One Plane During Separation of Chip, by V. I. Sadchikov.....	195
Adaptability of Thick-Walled Pipes During Nonuniform Heating, by D. A. Gokhfel'd and P. I. Yermakov.....	201
On the Stability of Axially Compressed Cylindrical Shell in Plastic Flows, by G. V. Ivanov.....	208
On Determining the Diagram of Compression of Low-Carbon Steel in the Region of Elasto-Plastic Deformations, by Yu. S. Stepanov.....	220
On the Method of Investigating the Scalar Effect of Cavitation Erosion, by I. I. Varga, B. A. Chernyavskiy and K. K. Shal'nev	233
Generalization of Certain Experiments on Crisis of Boiling of Liquid During Forced Motion on Basis of Thermodynamic Similarity, by L. Ye. Mikhaylov.....	253
Investigation of Mechanism of Boiling During Large Heat Flows by Means of Photography, by N. N. Mamontova.....	265
Method of Boundary Conditions in Problems of Stationary Thermal Conductivity, by V. I. Van'ko.....	271
On the Convective Instability of a Compressible Fluid in Magneto hydrodynamics, by A. A. Rukhadze.....	275
Investigation of Crisis of Boiling During the Flow of Under-heated Methyl Alcohol, by P. I. Povarnin.....	283
Determining the Shape of a Gas Bubble in an Axially Symmetric Fluid Flow, by O. M. Kiselev.....	293
On the Resistance of a Flat Plate Perpendicular to a Hypersonic Flow of a Rarefield Gas, by O. G. Fridlender.....	298
On the Interaction of Perturbations with Shock Wave in a One-Dimensional Transient Motion of Gas, by Zh. S. Sislyan....	305
About Established Motion of Electroconducting Fluid in a Rectilinear Channel During Presence of Transverse Magnetic Field, by O. A. Berezin.....	310
Experimental Investigation of Speed of Sound in Argon on Line of Saturation, by I. S. Radovskiy.....	317
Influence of Magnetic Field on Optimum Composition of an Electroconductive Gas Mixture, by E. P. Zimin and V. A. Popov.	323
Certain Methods of Investigating the Dynamic Structure of Plasma Flows, by A. N. Trokhan.....	329

Available From FID-ME-64-85



# Journal of Applied Mechanics and Technical Physics

The Faraday Press cover-to-cover translation  
of *Zhurnal Prikladnoi Mekhaniki i Tekhnicheskoi Fiziki*

## Contents

Number 1 • January-February 1965

### Editorial Board

*Zhurnal Prikladnoi Mekhaniki  
i Tekhnicheskoi Fiziki*

a publication of the  
Academy of Sciences USSR

Yu. N. Rabotnov,  
Editor-in-Chief

P. Ya. Kochina,  
Associate Editor

I. I. Novikov,  
Associate Editor

P. V. Kharlamov,  
Corresponding Secretary

E. I. Grigolyuk

M. F. Zhukov

A. A. Koval'skii

L. S. Kozachenko

S. S. Kutateladze

M. A. Lavrent'ev

R. Z. Sagdeev

R. I. Soloukhin

N. A. Teltakikh

S. A. Khristianovich

	Russian page	English page
The Nonlinear Problem of Collision of Rarefied Plasma Clouds. V. A. Enal'skii and V. S. Imshennik .....	3	1
A Solvable Model of Weak Turbulence, V. E. Zakharov .....	14	10
Influence of the Hall Effect on Hypersonic Flow Past a Wedge. L. A. Panchenko .....	21	17
Damping of Plasma Waves, R. K. Mazitov .....	27	22
On the Equations of Nonequilibrium Gas Flows, M. N. Kogan ...	32	26
Determination of Heat Fluxes in the Neighborhood of a Double Curvature Stagnation Point in a Flow of Dissociating Gas of Arbitrary Chemical Composition, G. A. Tiskii .....	45	38
On the Theory of Combustion Stability of Powders, S. S. Novikov and Yu. S. Ryazantsev .....	56	49
On the Nonsteady-State Theory of Thermal Autoignition, S. A. Kaganov .....	62	54
The Determination of Ignition Conditions, A. M. Grishin and O. M. Todes .....	68	59
Electrical Conductivity of Air in the Presence of an Impurity, I. A. Krinberg .....	76	66
Obtainable Accuracy in the Solution of Practical Problems by Small-Amplitude Wave Theory, A. M. Zhukovets .....	83	72
Reactive Impulse at High Impact Velocities, E. I. Adriankin ....	88	77
On the Theory of Vibrational Relaxation of Diatomic Molecules, M. N. Safaryan and E. V. Stupochenko .....	93	83
The Speed of Sound in a Reacting Gas Mixture, E. M. Chernykh ..	95	86
Experimental Investigation of Shock Wave Detachment in Real Gases, V. G. Maslennikov, I. G. Paritskii, S. L. Rozov, and A. M. Studenkov .....	98	89
Emission Spectrum of a Detonation Wave in Nitromethane, A. N. Dremin and S. D. Savrov .....	103	94
Calculation of the Pressure Rise at a Combustion Front, N. N. Bakhman .....	106	97

(Continued)

Single Issue: \$35

Annual Subscription: \$150

© 1966 by The Faraday Press, Inc.

All rights reserved. This publication or parts thereof may not  
be reproduced in any form without permission of the publisher.

## The Faraday Press, Inc.

84 FIFTH AVENUE, NEW YORK, N. Y. 10011

**CONTENTS (CONT'D)**

	Russian page	English page
Heat Transfer in the Neighborhood of the Stagnation Point with Discontinuous Prandtl Numbers, I. N. Murzinov.....	109	100
Thermal Conductivity of Tungsten at High Temperatures, Yu. N. Simonova and L. P. Filippov.....	111	102
On the Kinetics of Polycrystal Shock Melting, N. M. Kuznetsov.....	112	104
Convection and Heat Transfer Near the Critical Point of Carbon Dioxide, E. N. Dubrovina and V. P. Skripov.....	115	107
Heat Transfer from a Cylinder in a Sound Field at Grashof Numbers Approaching Zero, A. P. Burdukov and V. E. Nakoryakov.....	119	112
The Error of the Plane-Layer Approximation as Applied to Radiation in the Boundary Layer of a Gray Gas, V. P. Zarnuraev.....	126	118
Creep Buckling Criteria, V. I. Van'ko.....	127	121
A Note on the Memory Theory of Creep in Metals, I. I. Bugakov.....	131	125
Method of Elastic Solutions in Theory of Plastic Flow, V. D. Klyushnikov.....	133	128
Creep Tests on Glass-Reinforced Plastic Plates, G. I. Bryzgalin.....	136	131
On the Nature of the "Pinch Effect" and Some Other Problems in the Theory of Failure, G. P. Cherepanov.....	139	134
Experimental Data on Creep of Engineering Alloys and Phenomenological Theories of Creep, A Review, Yu. N. Rabotnov.....	141	137
The Physical Nature of Creep in Crystalline Bodies. A Review, V. L. Indeabom, M. A. Mogilevskii, A. N. Orlov, and V. M. Rosenberg.....	160	155

**Available From Parady Press**

# Soviet Physics TECHNICAL PHYSICS

A Translation of "Zhurnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 36, No. 1, pp. 3-201, January, 1966)

Vol. 11, No. 1, pp. 1-152

July, 1966

## CONTENTS

	PAGE	RUSS. PAGE
Method of Images in Magnetostatics for a Spherical Superconducting Boundary. <u>V. N. Beloozerov and M. L. Lévin</u> . . . . .	(T) 1	3
Oscillations of a Plasma Located in Constant External Electric and Magnetic Fields. <u>S. P. Bakanov and A. A. Rukhadze</u> . . . . .	(T) 4	7
Propagation of Electromagnetic Waves in a Plasma Located in the Magnetic Field of a Straight Direct Current. <u>Yu. Ya. Yashin</u> . . . . .	(T) 8	13
Kinetic Theory of the Propagation of Electromagnetic Waves through a Plasma Layer. II. <u>A. N. Kondratenko and V. I. Mirosanovich</u> . . . . .	(T) 16	25
Emission of Electromagnetic Waves by an Electron Beam Moving Above a Diffraction Grating. <u>O. A. Tret'yakov, É. I. Chernyakov</u> and <u>V. P. Shestopalov</u> . . . . .	(T) 22	33
Plasma Probing by an Electromagnetic Field. <u>Yu. N. Dnestrovskii</u> and <u>D. P. Kostomarov</u> . . . . .	(T) 26	39
The Theory of the Stability of Axially Symmetric Inhomogeneous, Current- Carrying Plasma. <u>E. E. Lovetskii</u> . . . . .	(T) 31	45
Location of Moving Plasmoids from a Coaxial Injector. <u>S. D. Il'in</u> , <u>V. M. Likhachev, S. S. Petrushev, and A. V. Chernetskii</u> . . . . .	(E) 36	53
On the Effect of an Inhomogeneous Dielectric Constant on Properties of Natural Modes in Resonators. <u>T. I. Kuznetsova</u> . . . . .	(T) 40	58
Plasma Research in the Tuman Device. <u>V. E. Golant, M. G. Kaganskii</u> , and <u>V. A. Ovsyannikov</u> . . . . .	(E/T) 46	67
Acceleration of a Plasmoid in a Coaxial Accelerator with Eroding Electrodes. <u>P. M. Kolesnikov</u> . . . . .	(T) 56	80
Operation of a Coaxial Plasma Source in the Tracking Mode. <u>V. P. Goncharenko</u> , <u>N. T. Derepovskii, and I. I. Konovalov</u> . . . . .	(E) 60	85
Active Diagnosis of Hot Plasma with the Use of Neutral Particles. <u>V. V. Afrosimov, B. A. Ivanov, A. I. Kislyakov, and M. P. Petrov</u> . . . . .	(E) 63	89
Investigation of Plasma Density in Alpha by a Fast Atomic Beam. <u>V. V. Afrosimov, B. A. Ivanov, A. I. Kislyakov, and M. P. Petrov</u> . . . . .	(E) 72	102
Energy Distribution of Hydrogen Plasma from a Coaxial Source. <u>I. M. Zolototrubov, A. B. Rastrepin, and I. P. Skoblik</u> . . . . .	(E) 79	111
Dissociative Charge Transfer and Ionization in Collisions of Neon Atoms and Ions in Carbon Monoxide. <u>G. N. Ogurtsov and I. P. Flaks</u> . . . . .	(E/T) 84	117
Ionization and Scattering and Characteristic Energy Losses in Atomic Collisions. <u>V. V. Afrosimov, Yu. S. Gordeev, M. N. Panov, and N. V. Fedorenko</u> . . . . .	(E) 89	123
Focussing Properties of an Electrostatic Mirror with a Cylindrical Field. <u>V. V. Zashkvara, M. I. Korsunskii, and O. S. Kosmachev</u> . . . . .	(T) 96	132
Magnetic Spectrometer with Spatially Varying Field. <u>N. I. Tarantin</u> . . . . .	(T) 100	139

(Continued)

Copyright © 1966 by the American Institute of Physics, Incorporated

Available From The American Institute of Physics  
Vol XXXVI, No 1, July 1966

**CONTENTS (continued)**

	PAGE	RUSS. PAGE
Turbulent Flow of a Liquid Metal in Magnetohydrodynamic Channels of Round Cross Section. <u>A. I. Khozhainov</u> . . . . .	(T) 105	147
Electron Capture in Betatron Acceleration. <u>Yu. N. Lobanov and N. I. Tulinova</u> . . . . .	(T/E) 108	151
Microbunching in a Linear Electron Accelerator. <u>E. K. Ostrovskii</u> . . . . .	(E) 111	155
Spectral Line Width of a Reflex Klystron. <u>S. A. Kornilov</u> . . . . .	(T) 117	163
New Method of Pumping Hydrogen. <u>F. I. Busol and V. B. Yuferov</u> . . . . .	(E) 125	174
Strong Shock Waves in Air. <u>A. E. Voitenko</u> . . . . .	(E) 128	178
Investigation of Hollow-Cathode Discharge. I. Comparison of the Electrical Characteristics of a Hollow Cathode and a Positive Column. <u>V. S. Borodin and Yu. M. Kagan</u> . . . . .	(E) 131	181
Multiphase Cylindrical Inductor with a Multipole Field. <u>A. A. Fomin</u> . . . . .	(T) 135	186
<b>BRIEF COMMUNICATIONS</b>		
Linear Theory of Excitation of Plasma Oscillations by a Beam of Charged Particles. <u>Yu. S. Kostyukova and F. M. Nekrasov</u> . . . . .	(T) 138	191
Measurement of Wavelength by Angle of Incidence in a Plane Metal Grating for the n-th Harmonic Surface Wave. <u>A. I. Adonina and A. M. Andrusenko</u> . . . . .	(E/T) 142	194
<b>LETTERS TO THE EDITOR</b>		
Nonlinear Theory of Plasmod Dipole Resonance and Coherent Plasma Acceleration. <u>A. A. Andronov</u> . . . . .	(T) 144	196
Determination of Trace Quantities of Ar <sup>37</sup> and H <sup>3</sup> . <u>S. V. Viktorov, G. E. Kocharov, and V. O. Naidenov</u> . . . . .	(E) 147	199

Available From The American Institute of Physics  
 Vol XXVI, No 1, July 1966

# INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover tables of contents.

## - A -

Aaltonen, Elsa	26
Abalo, Firmin	29
Abdullayev, Z.	10
Abendroth, K.	14
Abzhanov, K.	10
Adachi, A.	78
Adonts, G. T.	56
Adrian, H.	76
Agalovyan, L. A.	86
Agasyan, V.	2
Ahmad, Mukarram Muhammad	33
Akivis, Yu. M.	62
Aladiev, I. T.	87
Aleksandrov, N.	51
Aleksandrov, V.	3, 4
Aleksandrova, N. N.	44
Alekseyev, B. A.	82
Alekseyev, V. L.	82
Alekseyevskiy, Ye. Ye.	3
Alimov, A. P.	59
Alimukhamedov, A.	10
Alisov, N.	5
Alitovskiy, S.	33
Almer, M.	13
Alms, Hans-Werner	16
Althabe, Gerard	30
Amonakala, Espoir	30
Amorin, Oswald	37
Amos-Djoro, Ernest	31
Andrukhiy, E. V.	41
Anghel, N.	19
Anisimov, G.	7
Anisimov, S. N.	47
Antonova, Ye. A.	66
Antosenkov, Ye.	2
Araki, T.	79
Arnault, Jules	82
Aronov, D. A.	86
Aronson, A. Ya.	59
Aroudaki, Yahya	32
Arsent'yev, V. V.	88
Arsen'yeva, N. Ya.	51
Arslambekov, V. A.	86
Artemov, K. P.	82
Asanov, A. I.	47
Ashbel', Z. Z.	41

Askar'yan, G. A.	87
Asrorov, I.	10
Atlas, Z.	1
Atsuyoshi, Niijima	84
Aubertein, Paul	69
Audias, Arlette	83
Audouin, A.	69
Autra, Mamadou Traore Ray	31
Avdeev, B. A.	65
Azizov, U.	66

## - B -

Babalyana, G. A.	47
Babenko, K. I.	87
Babulevich, E. B.	82
Backa, Abdyl	12
Baez, Luis	37
Bagdas, Khaled	33
Bai-Qin, J.	53
Bajic, Milan	26
Bajorat, W.	61
Bakharev, A. M.	49
Bakos, V.	20
Bakulev, V. I.	85
Balakhonov, I. S.	38
Balashov, A.	6
Baleshov, E. P.	56
Baldin, V. A.	65
Banja, Hasan	12
Barbarou, M. J. B.	61
Barbu, Eneea	57
Barkovskiy, N.	1
Bartkova, T.	13
Baryshev, V. A.	51
Bassalygo, L. A.	81
Bathow, G.	89
Batyevskiy, A. L.	85
Baudouin, Maurice	27
Baumel, A.	77
Bauschinger, O.	38
Baybakov, N.	4
Bayevskiy, R. M.	38
Baymakov, Yu. V.	66
Bayshev, S.	4
Bazan, Ch.	88
Bazarov, Sh.	4

Bazhdarov, Dimitur	12
Beaujeu-Garnier, J.	35
Bedivan, Elena	19
Begushevskiy, Z.	84
Belakovskiy, Ya.	59
Belousev, V. V.	52
Belousov, I. M.	51
Belov, V. S.	7
Belusov, A. P.	43
Belyayev, G. M.	52
Belyayev, I.	8
Beone, G.	84
Beqja, Hamit	22
Berezowski, Stanislaw	25
Bergmeyer, H. U.	46
Bernier, Henri	61
Bernshtein, L. A.	64
Bernt, E.	46
Besrodnik, Felipe	37
Bethge, H.	88, 89
Beuchet, Eno	31
Bihiku, Koco	24
Biji, Mircea	25
Bilen'kiy, B. F.	89
Bindernagel, I.	72
Biskup, S.	23
Bisyarina, E. A.	41
Blagonravov, A. A.	57
Bloch, H.	47
Blokh, E. L.	81
Blokhinov, Ye. G.	50
Blyakhman, L.	10
Bobkov, V. G.	38
Bobkovoi, N. M.	64
Bocharova, Z. Z.	42
Bochenski, Zenon	16
Boehme, C. F.	15
Boerescu, Cezar	57
Bogdanov, A. A.	54
Bogomolov, B. D.	63
Bohm, H.	73
Rohm, Siegfried	14
Boikov, V. I.	63
Bojic, M.	70
Boldanov, Victor	36
Bollano, Priamo	12
Bolotin, V. V.	86, 87
Bonaud, M.	70
Borisov, V.	6
Borisov, Ye.	3
Born, K.	71
Borodin, N. A.	66
Borovicka, Lumir	60
Borts, Yu. M.	63

Borutskiy, E. V.	9
Boulanger, Yu. D.	49
Branowitz, Z.	25
Branscheid, G.	75
Brdlik, P. M.	85
Breuninger, W.	76
Briner, E.	69
Broder, D. L.	88
Brown, A. G.	57
Brozzo, P.	78
Brudno, A. L.	41
Brun'ko, V.	2
Bruevich, S. V.	48
Bryabrin, V. M.	81
Buch, A.	73
Bucher, V.	46
Buchwald, Witold	39
Bucken, H.	75
Budnikov, G. K.	87
Budyko, M. I.	49
Buerger, S.	46
Buevich, L. V.	41
Bugayev, N. F.	11
Bulgaru, M.	20
Bulle, G.	73
Bunge, Hans-Joachim	61, 77
Bunke, H.	61
Bura, E.	57
Burchakov, A. S.	65
Burian, J.	13
Buriez, R.	28
Burmakin, E. V.	39
Burschtein, E. A.	40
Burstein, Uzi	33
Buscher, R.	76
Rusuiocanu, M.	19
Buttinghaus, A.	76
Buzkov, V.	59
Bykov, S.	7
Byr'ko, V. M.	47

- C -

Cadariu, Gh.	25
Caprio, G.	78
Cardoso, Onelio Jorge	36
Careddu, P.	46
Casaus, Victor	36
Cavalcanti, R. Catolla	46
Cazacu, I.	20
Cellerino, A.	46
Cervenka, M.	68
Cervinka, M.	68
Ceterchi, Ioan	23

Cevoli, V.	78
Chang, Chi-Yun	34
Chang, Ch'ung-kan	67
Chang, Liang-shou	53
Chang, Wei-mo	34
Chang, Wen-chao	67
Chang, Wen-po	67
Chao, I-yang	53, 67
Charvat, E.	57
Chatskaya, Ye. Sh.	81
Chavanon, Paul	45
Chaudron, G.	69
Chebataroff, Jorge	37
Chebeksarov, N. N.	10
Chebotarev, G. A.	49
Checheleva, T.	4
Chekhonadskiy, N. A.	40
Cekhov, V. N.	56
Cekmarev, A. P.	66
Chekotillo, K. A.	51
Ch'en, Mou-yu	67
Ch'en, Shou-chun	53
Chen, Yung-kuei	33
Cheng, I-hsi	83
Cheredkova, A. N.	43
Chernilin, Yu. F.	83
Chernous'ko, F. L.	88
Chernov, V.	9
Chernyak, A. S.	47
Chernykh, K. F.	87
Chertkova, M. A.	44
Chervova, I. A.	40
Chetvarukhin, S. I.	7
Chevashova, K. L.	66
Ch'i, Pen-yu	35
Chia, Shih-cheng	67
Ching, Jung-lin	53
Chistyakov, F. M.	42
Chistyakova, V. G.	41
Chojnowska, J.	25
Cholaj, Henryk	18
Chou Li-san	35
Chrnorotov, E. S.	82
Chrzanowski, Mirosław	25
Chubarina, Ye. V.	50
Chudakov, A. Ye.	52
Chudnovskiy, A. F.	38
Chuh, Sheng Nien	60
Chukov, L. A.	57
Chumakov, M. P.	44
Churkin, G. S.	44
Chu'Shih, C.	52, 53
Class, I.	75
Clausen, U.	89

Cohnheim, O.	48
Collongues, R.	69
Conte, F.	60
Cruz, Ferreira, F.S.Da	46
Csikos-Nagy, Bela	15
Cubillas, Vicente	36
Cultrera, R.	26
Cumani, Tefik	22
Cwierz, Antoni	17
Czernek, J.	68

- D -

Dabkowski, Henryk	17
Dadayan, V. S.	7
Dahl, E.	70
Damoiseaux, H.	75
Daniel, E.	68, 69
Danilov, Yu. I.	86
Danishevskiy, G. M.	43
Danoczy, Richard	49, 84
Danov, Georgi	13
Darkanbaev, T. B.	40
Dattelbaum, J.	15
Daugavet, I. K.	81
Davydova, R.	65
Dawecki, Witold	16
De Broglie, Jean	29
Degee, Maurice	78
Deich, M. E.	85
Delaye, Th. J.	29
de Laffolie, H.	71
Delfin, Slava	21
Del van Cob, M.	39
Dembowska, Maria	90
Demidov, N. A.	59
Demiduk, G. P.	88
Demidyuk, G. P.	87
Demin, V. P.	38
Demory, Robert L.	45
Denisova, E. A.	43
Desvallees, M.	70
De Terra, Helmut	45
Devedzhiev, Marin	12
Diamandopol, M.	20
Dickens, P.	71, 76
Dill, P.	73
Dimant, I. D.	44
Dimitrescu, G.	19
Dimitrov, Atanas	12, 24
Dmitrov, K.	20
Dobrich, K.	76
Domandzic, Ante	25

Dorfler, G.	70
Dorogovtsev, A. Ya.	81
Doronin, U. P.	52
Dorr, W.	75
Dovgalyuk, B. P.	63
Draganescu, Emil	18
Draghici, Alexandru	23
Drouzy, M.	69
Dubovskoy, V. I.	40
Dubrovitskaya, N. I.	44
Dudin, M.	5
Dvinogortsev, I.	2
Dvoretzkiy, Ya.	23
D'yachenko, V.	4
Dydina, L. A.	51
Dyukalov, A. M.	88
Dzhurov, Dobri	23
Dzyuba, I.	8

- E -

Echterhoff, H.	72
Eckhold, H. G.	76
Egorov, Yu. M.	55
Eketorp, Sven	80
Elenz, H.	73
Ellitsgaard-Rasmussen, K.	68
Elschner, G.	15
Elwert, Gerhard	54
Emel'yanov, V. M.	86
Emmrich, Friedrich	16, 24
Emmerich, Heinz	16
Endrie, M.	68
Erlikh, D.	3
Ershov, F. I.	40
Esin, O. A.	63
Evangelisti, Roberto	61
Eveil, P. N.	31

- F -

Fabrikanos, A.	48
Fayerman, B. S.	90
Fedorov, V. V.	83
Fedorovskiy, G.	3
Fedulova, M. N.	50
Feher, Gyorgy	46
Feil, H. J.	71
Feiler, Eliezer	33
Feller, M.	61
Feretic, D.	83
Ferret, Janine	83

Fesquet, Henri	29
Filatov, I. I.	41
Filimonov, D.	3
Filipov, Grisha	12
Filz, Walter	25
Fink, F. K.	70
Finnern, B.	73
Fishta, Iljas	12
Fleishman, E. V.	43
Fomicz, Inzynier Grzegorz	17
Foryst, J.	80
Frank, G. M.	41
Franssen, H.	77
Froelich, Jean-Claude	31
Froment, M.	69
Funke, P.	75
Furman, A. V.	58
Furman, K. S.	83

- G -

Galanova, Z. S.	52
Galitseyskiy, B. M.	86
Galitskiy, N. F.	58
Gambaryan, P.	41
Gankovskiy, Yu. V.	33
Garango, Marc Tiemoko	29
Gasc, Marie-Therese	83
Gaston-Breton, P.	27
Gato, Mario Hidalgo	36
Gazenko, O. G.	40
Gazenov, St.	12
Gebauer, A.	63
Gel'bras, B.	6
Gencharov, V. V.	83
Generalov, N. A.	48
Gengnagel, H.	77
Georgiev, F. I.	40
Gerbasi, Jose	36
Gerek, Edvard	23
Gerhardt, A.	73
Germanov, G.	23
Gheorghiu, Nicolae	19
Giasan, N.	39
Gikhman, I. I.	81
Ginevskiy, A. S.	58
Giosan, Nicolae	19
Gironi, Giorgio	27
Glaubitz, F.	77
Glezer, V. D.	45
Gliberman, A. Ya.	64
Glushko, G. S.	63
Godard, S.	54

Godefroid, Munongo	29
Goetz, B.	70
Gol'dberg, V. Z.	82
Golorod'ko, S. O.	82
Goncharov, I. A.	63
Goossens, H.	72
Gorbanev, V.	64
Gordon-Polonskaya, L. R.	33
Gorelov, D. N.	58
Goruvskiy, N.	38
Goryukhina, T. A.	44
Goue, E.	70
Gozdek, V. S.	58
Gradewald, A.	15
Grahovac, Petar	21
Grassmann, W.	48
Gravskiy, G.	3
Grigorenko, Ya. M.	65
Grigor'yev, Yu.	10
Grimal'skiy, V. D.	43
Grimberg, Marcus	74
Grippa, Jacques	37
Gritsenko, Z. A.	64
Grodzovskiy, G. L.	38, 62
Gromov, S. V.	52
Groth, W.	15
Grubischi, P.	19
Gruneberg, Gerhard	14
Guarini, Ruggiero	27
Gudimov, A.	2
Gudkov, A. A.	66
Gudkov, I.	10
Gudkova, K. V.	66
Guinet, M.	38
Gul', Yu. P.	63
Gulyaev, A. S.	63
Gunbin, B. L.	62
Gural'nik, M. I.	59
Gurevich, V. Z.	59
Gusev, V. N.	86
Gut, K.	69
Gutman, N. R.	44
Gutowski, Antoni	18
Guyot, Eduard Joseph	45
Guz, O. M.	82

- H -

Ha Ke Tan	34
Ha, Van Lau	35
Haastert, H. P.	75
Haefely, W.	45
Hamada, Kunio	61
Hamanoue, Kumao	49
Hamawi, Hasan Al	32
Hargittai, Istvan	49
Hasko, F.	74
Hastrup, O. F.	60, 88
Hausler, Peter	89
Havers, K.	77
Hayashi, Koichiro	49
Hayashi, S.	79
Hayasi, N.	80
Heckel, R.	39
Heiderpriem, J.	75, 76
Helwig, N.	76
Hendry, R. J. A.	42
Herdea, Vasile	39
Heshcheretova, V.	82
Heyde, W.	48
Hilmia, Sabah	12
Hirahata, H.	79
Hoang Van Hanh	36
Hoffmann, Mieczyslaw	17
Holec, G.	71
Holler, P.	74
Hollmann, F. W.	76
Hollnagel, Rostock	16
Holzmuller, A.	72
Hopfner, G.	72
Hornbogen, G.	14
Horvath, T.	19
Horvath, Zoltan	46
Hsu-yun	82
Hu, Hui-min	66, 67
Huch, R.	71
Hucka, M.	68
Hytonen, Erkki	53

- I -

Iashnov, V. A.	44
Iba, Shozo	46
Iinuma, Takeshi A.	84
Iliev, Yordan	12
Imyanitov, I. M.	50
Inagaki, Michio	78
Ingerman, M.	2
Inozemtsev, N.	8
Ionescu, Constantin	19
Ionov, V.	2
Ippolitov, A. S.	85
Ippolitov, G. M.	6
Ishmayev, S. N.	82
Itami, Hiroharu	78
Ito, Nobuo	84
Ivanov, V.	7
Ivanov, V. V.	58
Ivanovici, Dumitru	19
Ivanovskiy, M. N.	54
Iwase, K.	79

- J -

Jachowicz, Ryszard	25
Jaeger, H. E.	27
Jagustyn, Wladyslaw	18
Jakel, T.	74
Jamnicki, Ivo	21
Jancikovic, Milan	21
Janiche, E. H. W.	74
Janiche, W.	77
Jankovic, Slobodan	22, 80
Jannermann, G.	14
Jaroszewski, Tadeusz	
M.	25
Jenny, D.	47
Jevtic, Ljubomir	26
Jobst, R.	15
Joh, H.	78
Jourdain, M.	27
Joyner, T.	53
Jozwiak, Wojciech	25
Jui-Yung, C.	53
Juntgen, H.	72
Juretzek, G.	74
Jurquet, Jacques	26

- K -

Kabakchi, A. M.	41
Kaczmarek, Karol	62
Kagan, F.	39
Kalachev, P. D.	87
Kalmyk, N.	8
Kaminski, Lech M.	61
Kamps, P.	15
Kantorovich, L. V.	11
Kapitsa, P.	10
Kapustin, Ye.	10
Karavanov, A.	6
Kargol, Marian	17
Karlov, N. V.	88
Karnovetskiy, K.	84
Kartashov, I. N.	59
Kaschade, H.	15
Kashlev, Yu. A.	62
Kaspar, G.	72
Kaspi, M.	27
Kas'yan, I. I.	38
Kato, M.	79
Katrus, O. A.	65
Kawaguchi, T.	79
Kawakami, Waichiro	84
Kawakita, T.	78
Kawecki, Witold	17
Kazakovtsev, V. S.	81
Kazanskiy, G.	3
Kazavchinskiy, Ya. Z.	85
Keh, Zygmunt	18
Keita, Madeira	30
Keita, Modibo Baba	29
Kempers, H.	72
Kerepesi, M.	46
Kerov, V. L.	11
Keseru, Janos	16
Kharakter, Zh. Z.	44
Kharin, G. N.	62
Khristov, Emil	13
Khristov, Stoil	22
Khrulev, V. M.	64
Khudosovtsev, N.	2
Khvedelidze, M. A.	43
Khusainova, N. Z.	44
Kidman, L.	74
Kieffer, R.	74
Kiehl, J. P.	69

Kil'chevskiy, N. A.	85, 86
Kimel, L. R.	85
Kinoshita, Hideo	78
Kirpichnikov, S. N.	49
Kiselev, G. A.	6
Kislyakov, V. A.	45
Kitayev, Yu. P.	87
Kittel, G.	15
Klaus, F.	75
Klaus, F. L.	71
Kleditzsch, M.	14
Kligher, O. D.	18
Klimova, T. V.	86
Klingbeil, Horst	15
Knyazyuk, V.	6
Koblitskaya, A. F.	44
Kobulashvili, Sh. N.	58
Kobzev, B. B.	56
Kobzova, R. I.	47
Koch, B.	89
Koch, W.	71
Kochetov, S. V.	52
Koda, Kugao	84
Kodama, I.	78
Kodrle, L.	68
Kohler, E.	75
Kohn, K.	89
Kohout, Otokar	13
Koji, Fukawa	89
Kolenc, Miroslav	21
Kolev, G.	23
Kollath, R.	89
Kolpakov, B.	4
Koltermann, M.	72
Kondrat'eva, E. N.	40
Kondrat'yev, F. V.	83
Kondrat'yeva, N. Ya.	9
Konig, P.	71
Kopavcek, J.	59
Koptev, A. P.	52
Kornev, A. I.	11
Kornis, Ernest	57
Kornyeyev, V. V.	47
Korol, S. A.	42
Korovkin, A.	3
Korshak, V. V.	47
Kosevska, L.	42
Kosorukov, I.	6
Koster, W.	70, 71
Kotchenko, F. F.	55
Kotik, M. G.	8
Kotova, A. V.	62
Kovacs, Gyula	46
Kovalenko, A. D.	65

Kovalev, A. P.	85
Kozhevnikov, Ye.	6
Kozlov, O. V.	82
Krachino, V. V.	55
Krajcir, Frantisek	21
Kramer, Erwin	15
Krasnova, A. F.	41
Krasovskiy, G. A.	1
Krauss, Krzysztof	18
Krautmacher, H.	75
Kravchenko, Yu. Ya.	59
Kravtsiv, Bohdan	11
Kremenskiy, I. G.	65
Kremer, R.	68
Kripyakevich, P. I.	66
Krivitskiy, B. Kh.	56
Krol, L.	80
Kronrod, A. S.	41
Krumbiegel, W.	14
Krumov, Georgi	13
Kryuchkova, G. S.	40
Ksenofontova, A. I.	65
Kucera, J.	55
Kudryavtsev, V.	30, 31
Kudryavtsev, Vladimir	7
Kukanov, F. A.	62
Kukkonen, E. Ye.	63
Kulakovskiy, V. B.	55
Kulikov, V. V.	65
Kumo, I.	78
Kunin, P. Ye.	41
Kuprianoff, F.	39
Kuron, H.	54
Kurzeja, J.	77
Kusakawa, T.	79
Kuzhman, M. I.	41
Kuznetsov, I. T.	9
Kuznetsov, N. M.	9, 47
Kuznetsov, O. A.	52
Kvasha, L. G.	50

- L -

Laborit, G.	45
Lachenaud, M. R.	69
Lahav, Yehudah	22
Lambert, C. R.	46
Lan, Chia-ch'en	67
Lang, K.	74
Lange, Rudolf	16
Lassota, K.	69
Lastochkin, V. P.	55
Lavrenchik, V. N.	82

Lavrentovich, Ya. I.	41
Lazarev, L. Ya.	85
Lebedev, I. V.	56
Lebedinskiy, A. I.	51
Le Bouc, M.	70
LeClerc, B.	69
Le, Das Chihh	35
Ledune, J.	68
Lefaux, R.	48
Legov, S.	33
Lehar, F.	83
Lehmann, Th.	89
Lemfeld, J.	68
Leonov, Roal'd Aleksandrovich	52
Leont'yev, L.	5
Leopold, Antoni	39
Le, Quang Ba	35
Lesage, J.	70
Lesage, P.	70
Leshchenko, V. G.	57
Leushin, N. I.	50
Levintavich, E. V.	86
Levit, G. O.	3
Li, Chu-p'ing	33
Lieberman, Ye.	5
Lieberman, Yevsey	4
Liberson, W.	46
Lickteig, E.	74
Lieser, K. H.	48
Lihl, F.	71
Li, Kuo-chieh	53
Lin, Hsin-ying	67
Liska, F.	13
Litvak, S. E.	65
Liu, Ch'ang-ling	53
Livescu, M.	19
Livshits, N. N.	38, 41
Lobl, K.	72
Loktionov, G. M.	44
Lomic, V.	13
Lonsky, B.	68
Lorincz, Lajos	16
Losev, S. A.	48
Lovi, A. A.	9
Lozchnikov, E. B.	62
Lozinov, D.	30
Lozovoy, V. I.	6
Lubyanitskiy, G. D.	59
Lubyanov, I. P.	44
Ludemann, Karl- Friedrich	67
Ludyga, J.	74
Lueg, W.	75

Lukin, E. P.	44
Lukomskiy, G. I.	41
Lupan, S.	19
Lux, B.	48
Luzgin, V. P.	47
Lysukhin, I. F.	8
Lytvynenko, L. H.	43
Lyubchenko, I. S.	86
Lyudkovskaya, R. G.	40

- M -

Mach, E.	47
Magakyan, Yu. A.	40
Maioreskiy, E. V.	59
Maizel's, D. L.	64
Makaryavichius, V. I.	47
Makkaveyskiy, P. A.	40
Maksimovic, Slobodan	21
Malkin, I. G.	81
Malot, F.	26
Malycha, Czeslaw	17
Mambetov, B.	2
Mampel, L. M.	7
Mander, Gertrud	30
Mang, Tung-hung	67
Manicatide, Radu	20
Manier, G.	76
Manolescu, R.	19
Manukyan, N.	5
Manusov, E. B.	47
Many, P.	28
Marcean, W.	24
Marchenko, L. N.	57, 87
Marcu, Gheorghe	18
Margarido, Alfredo	31
Markov, P.	23
Marques, P.	46
Marshak, M. Ye.	41
Marshunova, M. S.	52
Mashkova, Ye. S.	62
Maskov, Dietrich	16
Maslennikov, V.	3
Matchanov, N.	4
Matsubara, Hisao	46
Matsuda, K.	46
Matsuda, S.	78
Matsuoka, Osamu	46
Matting, A.	75
Mat'tsev, E. D.	83
Matzke, H.	83
Mazanek, K.	80
Mazanov, K.	3
Mazov, V.	9
Mazurenko, O. Ya.	47
Medovar, B. E.	69
Medvedev, V.	9
Melnikov, G. B.	44
Mel'nikov, D. I.	6
Mel'nikov, N. V.	57
Merkel, F. W.	46
Merkov, A. M.	42
Meshcheriakova, I. M.	43
Meshkova, T. M.	44
Metz, A.	72

Meyer-Nolkemper, H.	77
Michel, A. H.	69
Miculescu, Angelo	20
Midtsev, V.	7
Mikhailov, E. I.	57
Mikhaylov, Ivan Ivanovich	81
Mil'khiker, M. A.	51
Mil'man, Ya. V.	57
Mil'skiy, A.	7
Minina, L. S.	50
Minkowski, R.	89
Mirtes, Bohumil	56
Mirza, Adrian	25
Mishchenko, V. I.	7
Misiuna, Wladyslaw	17
Mitel'man, Ye.	1
Mitrega, F.	17
Mitrega, Jan	18
Mittag, Gunter	14
Mohle, Walter	77
Mohler, H.	15
Moiseyev, N. N.	88
Moissejev, N.	54, 88
Molchanov, V. A.	62
Monin, I. F.	51
Monreal, K.	75
Montagnier, J.	69
Mori, T.	79
Morinaga, K.	80
Morita, Sh.	79
Moshkov, B. S.	57
Mosin, F. V.	58
Mosse, A. L.	85
Mostovoi, V. I.	82
Mu'tamid Muharran	33
Muller, C. A.	71
Muller, H.	14
Muminov, V. A.	86
Mury, Gilbert	28
Mushetsyanu, K.	42
Mushetsyanu, V.	42
Mutawalli, Sami	33
Mutsynov, S. S.	9
Mutwalli, Kisham	32
Myuyur, Kh.	6

- N -

Naberezhnyi, A. I.	43
Nace, Piro	38
Nacken, M.	71
Naczynski, Jerzy	62
Nadaud, L.	38

Nadel', S.	10
Nagradova, N. K.	47
Nakai	84
Natanzon, M. S.	63
Navrotskiy, G. A.	58
Nazaryan, E. O.	81
Negretti, F.	46
Neklyudova, L. I.	44
Nekrasov, N.	5
Neprochnov, Yu. P.	49
Neshcheretova, V.	82
Nesteruk, V. F.	56
Neumann, Alfred	14
Nguyen, Van De	35
Nicolescu, L.	24
Nikiforov, I.	10
Nishikawa, Kaneyasu	61
Nishimura, T.	79
Noda, T.	78
Noel, Y.	68
Nohara, Norimasa	84
Nomura, Sueo	78
Norinder, Harald	88
Nosilovskiy, A.	2
Noskova, G. L.	42
Novak, Ivan	21
Novoselov, P.	2
Novysh, V. V.	56
Nowak, Zdzislaw	17
Nuriyev, Z.	4

- O -

Oberbach, K.	64
Obraztov, V. V.	55
Oelschelegel, G.	16
Oelsen, W.	70
Okane, Isao	78
Ol'shevskiy, V.	9
Ono, Sh.	79
Onufriev, N. M.	60
Opitz, H.	73
Ordynstev, V. M.	81
Orlin, A. S.	60
Orlov, A. N.	81
Ormai, Laszlo	16
Ortiz, Gabriel	37
Osin'ska, Ya	42
Osipovich, L. A.	56
Ostrenko, W. J.	72
Osuga, T.	78
Otkhmezuri, G. L.	54
Overlach, H.	75
Owaki, R.	54

- P -

Paineau, Louis	82
Panchenko, A. M.	85
Panchenko, E. V.	64
Papier, J.	69
Paradjanin, Ljubisa	21
Paraschiv, P.	18
Parimbetov, B.	5
Parin, V. V.	42
Parma, V.	68
Parshin, A. N.	44
Pashkovskiy, M. V.	89
Pasternak, G.	10
Patona, B. E.	59
Pavlishchev, K.	10
Pavel, D.	57
Pavlov, A. A.	9
Pavlov, V. V.	85
Pavshtiks, E. A.	42
Pawelski, O.	80
Peglovskiy, V. L.	64
Peiter, A.	77
Peleg, Tamar	33
Pelekhatyy, M. J.	55
Pelglovskiy, V. L.	64
Pellinen, L. P.	49
Perevoshchikova, K. A.	43
Perun, Dymitr	17
Pessi, Ville	26
Peters, W.	72
Petrescu, A.	18
Petrov, A.	38
Petrov, Georgi	12
Petrovich, N. T.	56
Pfeifer, G.	45
Pham, Hung	34
Pham, Quang Hieu	35
Pham, Van Dong	34.
Philibert, M. J.	68
Philips, N. V.	56
Pichkovskaya, A. A.	44
Pick, Heinz	88
Piekarczyk, K.	39
Pikul', L.	5
Pikulski, Aleksander	17
Pinsker, A. G.	11
Pinus, N. Z.	50
Pisarev, A.	1
Pisarski, Grzegorz	18
Pistolese, Francesco	31
Plockinger, E.	70
Plyaskin, V. Ya.	8
Pocta, B.	72
Podshivalenko, G.	3

Pogodin, B. A.	58
Pohl, H.	76
Pokluda, L.	68
Pokrovskiy, A. A.	40
Pokrovskiy, N. S.	8
Polaczek, L.	48
Polulekh, V.	3
Pomeranets, K. S.	52
Popescu, Barbu	39
Popov, I. G.	38
Popov, N. N.	66
Porfiryeva, N. N.	56
Posadas, J.	37
Potekhin, N. V.	82
Pouillard, E.	70
Prazak, M.	67
Prazak, V.	67
Preikschat, Kurt	15
Prenosil, B.	73
Pribyl, J.	72
Pridantsev, M. V.	66
Primakov, Ye.	8
Prodan, A.	20
Prokshin, G. F.	63
Proshchenko, V. G.	43
Proskuryakova, T. A.	47
Protasov, V. R.	40
Pulfrich, C.	88
Pumpyanskiy, A. L.	11
Purvulov, Boris	13
Pushkin, A.	8
Putilova, I. I.	38
Pyatnitskiy, L. N.	85

- Q -

Qasimi, Kamal Al.	32
-------------------	----

- R -

Rabemananjara, Raymond William	29
Rabinovich, M. S.	87
Rac, I.	68
Rachkov, B.	3
Radtke, D.	76
Radulet, Remus	19
Rainko, Stanislaw	23
Raman, M.	3
Ramia, Mauricio	36
Randak, A.	77
Rato, Bernabe	30
Raver, Ion	19
Ravizza, P.	69

Raychenko, A. I.	65
Razdrogin, Iu. V.	65
Reachmann, J.	53
Rebane, K.	86
Rebane, T.	86
Recknagel, W.	75
Reich, G.	73
Reshod'ko, L. V.	89
Retif, A.	31
Rinesch, R. F.	72
Riznik, A. Ya.	65
Robo, Xhorxhi	22
Rochna, Stanislaw	17
Rodionov, G. A.	42
Rodstein, L. S.	55
Rojas, Marta	37
Roll, F.	72
Romberg, Margaretha	26
Rondot, Pierre	31
Rosenau, Gerhard	16
Roslyakov, G. S.	57
Rosowski, Stanislaw	17
Rothea-Laurent, C.	61
Rothenberg, M.	19
Rousset, David	8
Rozaliyev, Yu. N.	33
Rozen, M.	20
Rozhkov, V. A.	81
Rubtsova, Z. S.	63
Ruge, J.	74
Rukhin, Lev, Borisovich	50
Rusakov, I. V.	5
Rushkevych, Ye. A.	47
Rusinov, M. M.	58
Rybakova, T.	3
Rybicki, S.	80
Rybicki, Tadeusz	17
Rykunov, L. N.	47
Rys, J.	80
Ryzhikov, A. A.	64
Rzhanitsyn, A. R.	60

- S -

Saakyan, V.	5
Saarinen, Aarne	26
Sadokhin, Yu.	4
Safray, B. A.	64
Sahaldawi, Marwan	33
Saito, T.	79
Sakhalov, I. N.	51
Salas, A.	45
Saltykov, B.	82

Saltykov, V.	82
Sami, Mahmud	32
Samoilova, K. A.	83
Sauna, D.	68
Sano, K.	79
Santaella, Ramon	36
Santaren, Hector	37
Sapundzhiev, Delcho	13
Sassu, N.	80
Sava, A.	20
Savenkov, V. Ya.	62
Savilov, A.	40
Savin, A.	2
Savitski, Ya. M.	88
Savitskiy, Ye. M.	63
Sbytova, L.	11
Scharf, G.	76
Scheffe, G.	16
Schenck, H.	71
Schmidt, Carl	70
Schmidt, Gerhard	77
Schmidt, Herbert	48
Schmidt, Stanislaw	82
Schmidt, Von Alfred	48
Schnoor, Ernst	54
Schoberl, A.	74
Schoendoerffer, M. J.	68
Schoenfeldt, Wolfgang	61
Scholler, W.	76
Schreiber, D.	76
Schweisheimer, W.	45
Schwenzfeier, W.	80
Sedov, V. V.	47
Seeger, G.	73
Seiler, Hellmut	89
Semeka, V. A.	59
Senglet, R.	69
Sentyurikhina, L. N.	53
Serban, Gheorghe	20
Serebrenitskiy, P. P.	56
Serensen, S. V.	66
Sergeyev, V.	10
Severdenko, V. P.	62
Shadek, E. A.	64
Shakhnazarova, N. G.	40
Shakhtin, D. M.	86
Shaplo, Dalar	24
Sharenkov, Stefan	13
Shashkov, I. Ye.	86
Shchedrov, I. M.	35
Shchegolev, G. G.	62
Shcheglov, P. B.	55
Shchepetil'nikov, V. A.	60
Sheftal, N. N.	87
Sheng Tsu-Yin	60

Sherger, Yu.	1
Shernazarov, L.	4
Shima, Makoto	84
Shimizu, M.	79
Shimonura, Ryutaro	61
Shintyapin, Yu.	7
Shitskova, A. P.	44
Shkabara, K. O.	47
Shliyenkov, A.	8
Shrayber, I.	1
Shu, Wen-po	67
Shul'gin, A. M.	38
Shulika, N. G.	85
Shusko, A. E.	60
Shutov, M.	9
Shved, G. M.	49, 50,
	51
Shvedov, Yu. V.	6
Silva, G.	54
Simon, K. H.	89
Simonov, P.	42
Simonov, Yu. A.	60
Simotsuma, T.	79
Sinyutin, G. V.	83
Siradovic, Borislav	21
Sizov, A. I.	88
Skoblo, Yu. A.	82
Skomorovskiy, Y. G.	59, 62
Skornyakov, G. P.	87
Skuin, K.	74
Slavov, Peyko	22
Slomyanskiy, G. A.	51
Slovesnik, B.	3
Smirnov, G.	59
Smirnov, N.	2
Smit, H.	74
Smitka, V.	14
Smol'nikov, B. A.	65
Smyslov, I. I.	56
Sobolev, N. D.	60
Sobolevskiy, A. G.	56
Soichiro, Ohara	49
Sokolov, Evgenii Nikolayevich	44
Sokolov, G. D.	5
Sokolova, M. P.	52
Solis, Jose	37
Solodikhin, A. G.	65
Solodkin, Ye. Ye.	58
Solodovnikova, V. V.	54
Solomoviei, I.	18
Solov'yev, V. D.	44
Soltan, S.	80
Sorokin, A.	26
Spahn, H.	72

Spasov, Sp.	23
Spasse, Sterjo	12
Sperling, G.	14
Spindler, E.	57
Spinu, Ioan	25
Spivakovskiy, A. O.	58
Spohn,	24
Springer, H.	73
Sredniy, I. Ye.	55
Staicu, Irimie	39
Stankev, Stoil	39
Stankevich, K. S.	55
Stark, Manfred	89
Starodubtsev, S. V.	86
Starovskiy, V.	7
Starshinov, A. I.	87
Starushenko, G. B.	8
Steffens, H. D.	75
Stepanov, A.	2
Stepanov, N.	5
Stoian, I.	19
Stokrpa, Dragic	21
Stolarz, St.	80
Stolov, R.	1
Stolov, N.	7
Stolyarov, G. A.	59
Streib, H.	64
Strezikozin, V.	11
Striganov,	88
Strogov, I.	10
Stryukov, L. P.	5
Studzinski, A.	39
Subbotin, V. I.	54
Suder, M.	20
Suica, S.	83
Sukachev, V. N.	43
Sulser, H.	15
Sultanovich, A. I.	55
Sumbayev, O. I.	82
Sun, Yun-Chu	67
Sune, Nicasio Ortin	39
Gung, Chungo-ho	53
Surin, Yu. V.	41
Surkov, G. A.	85
Sustacek, A.	13
Suzuki, Hamaji	84
Suzuki, K.	78
Svistunov, G. A.	49
Svitlychnyy, I.	8
Svyadoshch, Yu.	5
Syunyakova, Z. M.	48

- T -

Tabata, Yoneho	49
Taboyakova, V. Ya.	42
Tadzher, Vitali	13
Taflya, I.	1
Taganov, K. I.	66
Taits, E. M.	64
Takahashi, Tan	78
Takebuchi, Norio	49
Takizawa, Masao	84
Takuzo	39
Tal'roze, V. L.	48
Tamamoto, Sh.	79
Tamarashvili, L.	90
Tamm, Johannes	16
Tamonis, M. M.	47
Tamura, K.	78
T'an Cheng-yeh	53
Taniguchi	39
Tarczynski, Wacław	18
Tatur, S.	1
Tal'pukhovskiy, N. A.	56
Terlecki, E.	73
Tesch, K.	83
Tetart, M.	69
Thervet, F.	45
Thery, C.	61
Thieme, Rolf	15
Thomas, L.-V.	31
Tikhomirov, V. B.	83
Timoshuk, L. T.	56
Ting Hsun-fan	67
Tit, Teodor	19
Titarenko, S.	8
Tiunov, L. A.	42
Tkachuk, G. I.	81
Tokarev, S.	5
Tomilin, A. G.	41
Tonkin, V. N.	57
Torres, Alberto,	
Contramaestre	37
Toure, Sekou	30
Tramposch, O.	77
Tran, Phu Tuyen	34
Tran, Van Hien	34
Trebici, V.	20
Trentini, M. B.	69
Treptow, K. H.	75
Tripsa, I.	80
Troost, A.	76

Trostyanskaya, Ye. B.	65
Troyanovskiy, B. M.	59
Trufanov, A. V.	43
Tsarov, G. L.	88
Tschierske, E.	76
Tseng-Hao, C.	53
Tserkover, E.	8
Tsuchiya, Takehiko	46
Tsukhanova, O. A.	85
Tsurikova, A. P.	51
Tsuru, Shin'ya	62
Tubyanskaya, G. S.	47
Tul'chinskiy, L. I.	10
Tuma, H.	72
Tunscit, Gh.	20
Turcu, Ed.	20
Tverdokhlev, G. V.	41
Tyazhesti, Yu. A.	51

- U -

Uchida, A.	78
Uchiyama, I.	79
Uginchus, A. A.	58
Usenin, V.	4
Usevich, I. V.	64
Usmanov, Kh. U.	66
Utkin, E.	1
Uzhdavini, E. R.	41

- V -

Vakar, A. B.	40
Vakin, S. A.	56
Valeyev, K. G.	51
Valladares, C. do. P.	45
Vamos, Endre	62
van Triet, A. J.	45
Vasanov, Yu. A.	86
Vasil'chev, I.	5
Vasilev, N. N.	44
Vasilev, V. I.	60
Vasil'yev, G. A.	42
Vasil'yev, P. V.	38
Vasil'yev, V. N.	81
Vassy, Arlette	88
Vatkin, Ya. L.	66
Vavilov, A. A.	55
Vecera, M.	48
Vekic, Djuro	22
Veksler, M. A.	83
Velcea, Ion	19
Velichkova, Milka	22

Vengorovskiy, Yu. A.	6
Verdillion, Luc	69
Vertes, Imre	16
Vescan, N.	67
Vetlov, I. P.	50
Vetrov, O. P.	89
Vetyukov, M. M.	66
Vickovic, Gvozen	24
Vidal, Caludine	31
Villar, Carmen	37
Vishnevetskaya, N.	10
Vistinetskiy, M.	8
Vitkevich, V. V.	87
Vitkin, A. I.	66
Vitkin, E. I.	55
Vladimirov, N. P.	55
Vladimirov, T.	8
Vladoianu, R.	20
Vladychenko, I. M.	11
Voitkunskiy, Ya. I.	60
Volkel, U.	57
Volkov, I. P.	63
Volkov, V. G.	52, 63
Volkova, A. Ye.	4
Volodarskiy, L.	10
Volovyk, O. H.	43
Volyak, L. D.	85
vam Stein, H. D.	89
von Ardenne, M.	57
von der Dunk, G.	75
von Jordan, W.	76
Voronov, G. S.	32
Voskresenskiy, A. I.	52
Voznesenskiy, A. A.	59
Vrakin, V. F.	41
Vu, Dang Sieu	34
Vu, Trac	35
Vuksanovic, Radoslav	26
Vurbanova, Zora	24
Vykhandu, L. K.	42
Vyklicky, M.	72
Vyrubov, D. N.	60

- W -

Wagner, K.	73
Wahlster, M.	75
Wakabayashi, Kazuo	79
Wallner, E.	46
Wang, Chih-ch'i	34
Wang, Jun-ming	67
Wang, Ming-chang	33
Wang, Wen-kuang	66
Wang, Yu-min	53

Warchol, Pawel	17
Watanabe, Tamaki	49
Watanabe, Y.	79
Weiher, H.	5
Weineck, H.	76
Weise, H.	16
Weiss, Ch.	76
Wende, A.	16
Werner, Karlheinz	15
Wetterau, Heinz	43
Widell, K. E.	48,60
Wiegand, H.	74
Wiegel, H.	75
Wiesner, F.	74
Wildschultz, E.	70
Wiltshko, W.	46
Windisch, St.	74
Winsvold, Tore	26
Wirths, Von, W.	45
Wojewska, Aleksandra	18
Wolkenberg, Andrzej	57
Wos, Augustyn	18
Wu, Chin-yueh	49
Wu, Chuan-chun	35

- Y -

Yahya Arovdaki	32
Yajima, Seishi	84
Yakovlev, N.	7
Yakovlev, N. N.	41
Yakovleva, A. I.	40
Yamaguchi, T.	79
Yamamoto, Kazuo	84
Yampol'skiy, S. L.	58
Yanev, Yanko	13
Yankov, Georgi	13
Yan'shin, B. I.	58
Yarkovlev, M.	65
Yarmosh, N. A.	62
Yaroshenko, M. F.	43
Yashayev, S. Sh.	64
Yavnel, A. A.	50
Yefim'yev, A.	50
Yelyutin, V. P.	11
Yemel'yanova, S. V.	62
Yen, K'ai-wei	53
Yepikhia, Yu. M.	6
Yeremeyev, V. F.	52
Yeremin, P. F.	58
Yonehara, Satoshi	34
Yoshida, K.	79
Yoshida, Kenzo	84

Yu, Lai-kuang	53
Yudin, I. A.	50
Yusipov, Z. I.	65

- Z -

Zacaria, Guelfo	29
Zak, O.	45
Zakharov, A. M.	63
Zakharyan, V. S.	81
Zalesskiy, V. I.	63
Zalutskiy, I. I.	66
Zane, N. Ionescu	20
Zaytseva, A. K.	64
Zerova, M. V.	56
Zevin, L.	7
Zhak, D.	82
Zhamin, V.	11
Zhdanov, V. M.	40
Zherebtsov, P. I.	41
Zhigarev, A. A.	55
Zhilyayev, D.	62
Zhivov, L. I.	64
Zhmurkin, V. P.	43
Zhukov, A. I.	87
Zhulev, Yu. G.	86
Ziegler, S.	16
Zimmer, Gerhard	15
Zimmermann, E.	71
Zobel, Herbert	14
Zrelov, V. N.	62
Zubarev, V. F.	63
Zubkov, N.	9
Zubov, V. I.	81
Zuffa, A.	45

\* \* \*



Washington, DC 20505

7 September 2004

Ms. Roberta Schoen  
Deputy Director for Operations  
Defense Technical Information Center  
7725 John J. Kingman Road  
Suite 0944  
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sergio N. Alcivar".

Sergio N. Alcivar  
Chief, CIA Declassification Center,  
Declassification Review and Referral  
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

ENCLOSURE I



## Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0482732	78-03109A	56	1	5	100	Consolidated Translation Survey For April 1966	4/1/1966	203	Approved For Release	3/25/2004
AD0485874	78-03109A	56	1	6	101	Consolidated Translation Survey For May 1966	5/1/1966	250	Approved For Release	3/25/2004
AD0486759	78-03109A	56	1	7	102	Consolidated Translation Survey For June 1966	6/1/1966	265	Approved For Release	3/25/2004
AD0488131	78-03109A	56	1	8	103	Consolidated Translation Survey For July 1966	7/1/1966	178	Approved For Release	3/25/2004
AD0800235	78-03109A	57	1	1	104	Consolidated Translation Survey For August 1966	8/1/1966	264	Approved For Release	3/25/2004
AD0801439	78-03109A	57	1	2	105	Consolidated Translation Survey For September 1966	9/1/1966	211	Approved For Release	3/25/2004
AD0803607	78-03109A	57	1	3	106	Consolidated Translation Survey For October 1966	10/1/1966	247	Approved For Release	3/25/2004
AD0804982	78-03109A	57	1	4	107	Consolidated Translation Survey For November 1966	11/1/1966	203	Approved For Release	3/25/2004
AD0806465	78-03109A	57	1	5	108	Consolidated Translation Survey For December 1966	12/1/1966	234	Approved For Release	3/25/2004
AD0808740	78-03109A	57	1	6	109	Consolidated Translation Survey For January 1967	1/1/1967	277	Approved For Release	3/25/2004
AD0811456	78-03109A	57	1	7	110	Consolidated Translation Survey For February 1967	2/1/1967	234	Approved For Release	3/25/2004
AD0813563	78-03109A	57	1	8	111	Consolidated Translation Survey For March 1967	3/1/1967	342	Approved For Release	3/25/2004
AD0814969	78-03109A	57	1	9	112	Consolidated Translation Survey For April 1967	4/1/1967	268	Approved For Release	3/25/2004
AD0816126	78-03109A	58	1	1	113	Consolidated Translation Survey Through 31 May 1967	5/31/1967	210	Approved For Release	3/25/2004
AD0818406	78-03109A	58	1	2	114	Consolidated Translation Survey Through 30 June 1967	6/30/1967	271	Approved For Release	3/25/2004
AD0834366	78-03109A	58	1	3	115	Consolidated Translation Survey Through 31 July 1967	7/31/1967	318	Approved For Release	3/25/2004
AD0820905	78-03109A	58	1	4	116	Consolidated Translation Survey Through 31 August 1967	8/31/1967	308	Approved For Release	3/25/2004
AD0822924	78-03109A	58	1	5	117	Consolidated Translation Survey Through 30 September 1967	9/30/1967	330	Approved For Release	3/25/2004
AD0824515	78-03109A	58	1	6	118	Consolidated Translation Survey Through 31 October 1967	10/31/1967	200	Approved For Release	3/25/2004
AD0824581	78-03109A	58	1	7	119	Consolidated Translation Survey Through 30 November 1967	11/30/1967	194	Approved For Release	3/25/2004
AD0832430	78-03109A	58	1	8	120	Consolidated Translation Survey Through 31 December 1967	12/31/1967	100	Approved For Release	3/25/2004
AD0828154	78-03109A	58	1	9	121	Consolidated Translation Survey Through 31 January 1968	1/31/1968	221	Approved For Release	3/25/2004
AD0829939	78-03109A	59	1	1	122	Consolidated Translation Survey Through 29 February 1968	2/29/1968	246	Approved For Release	3/25/2004

Wednesday, August 25, 2004